

2. The operator shall Cement the 5½" casing string to adequately protect upper sandstone aquifers ~~which~~ ~~is/are~~ ~~the~~ ~~operator~~ by bringing cement back to at least 3665' (top of Moenkopi). The operator should increase cement volume for the 5½" casing string to approximately 300 SX. in order to ensure adequate coverage.

# Ashley Valley Sewer Management Board

P.O. Box 426  
Vernal, Utah 84078

Douglas B. Lawson  
John D. Stagg  
Larry Hacking  
Lorin Merkley  
Dennis Mott  
Greg Hawkins

September 13, 1989

Beard Oil Company  
Enterprise Plaza, Suite 200  
5600 North May Avenue  
Oklahoma City, Oklahoma 73112

Gentlemen:

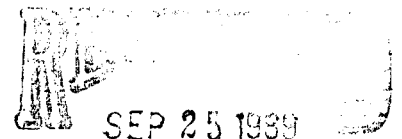
We are writing to give our written consent for your Ashley Valley #1 well to be drilled on our property. This consent is in accordance with the requirements of R615-3-2. We are the owner of all the property offsetting the drilling unit in the 460 foot radius of the proposed well.

If you have any questions or need any further assistance please call or write us.

Very truly yours,



Boyce W. Coombs (801) 789-0961  
Secretary - Treasurer



DIVISION OF  
OIL, GAS & MINES

**BEARD OIL COMPANY**

ENTERPRISE PLAZA, SUITE 200  
5600 NORTH MAY AVENUE  
OKLAHOMA CITY, OKLAHOMA 73112  
TELECOPIER NO. 405/842-9901  
405/842-2333

**RECEIVED**  
SEP 25 1989

DIVISION OF  
OIL, GAS & MINING

September 22, 1989

Utah Board of Oil, Gas and Mining  
Suite 350, 3 Triad Center  
355 West North Temple  
Salt Lake City, Utah 84180-1203

Re: Drilling Permit and Location Exception  
Beard Oil Company Ashley Valley #1  
NE SE NW SW Section 34-T4S-R22E  
Uintah County, Utah

Gentlemen:

Enclosed are our Application for Permit to Drill, 10 Point Plan, and Plats for the Ashley Valley #1 well. You should also receive a copy of our Single Well Bond for this well within the next week. I would also like to apply for a location exception.

The Ashley Valley #1 is located in Section 34-T4S-22E. This well will be located approximately 3.4 miles east of Naples, Utah (See Map A). The enclosed plat, maps and location were surveyed and location staked on September 11, 1989, by Uintah Engineering. The location was staked 1268' FWL and 1773' FSL (Map C) and is the only possible site for a well to be drilled reasonably within this quarter section. As you can see the Ashley Sewer Lagoon is to the west, rough terrain and a water reservoir to the east (see Map #1). Beard Oil Company has leased the SW/4 of Section 34 and therefore must stay within this quarter section. Ashley Valley owns this quarter section as well as the offsets to our location (See Map B). Boyce W. Coombs (representative for Ashley Valley) and I have physically checked the location, and agree on the site. Mr. Coombs has obtained approval from the Ashley Valley Sewer Board for the location, the Board having no objections to the proposed location site.

I have enclosed a letter of approval from the Ashley Valley Sewer Board evidencing their permission to drill on the proposed location. If you have any questions, please feel free to call me (David I. Allred) or Ivan D. Allred, Jr., at (405) 842-2333.

Please return approved copies of the enclosed Application to the address shown above, for the attention of Ivan D. Allred, Jr.

Sincerely yours,

BEARD OIL COMPANY



David I. Allred,  
Petroleum Engineer

DIA:tlg

Encl.'s

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. Lease Designation and Serial No. ----- Fee -----
b. Type of Well Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		6. If Indian, Allottee or Tribe Name -----
2. Name of Operator BEARD OIL COMPANY		7. Unit Agreement Name -----
3. Address of Operator DIVISION OF OIL, GAS & MINING Enterprise Plaza, Suite 200, 5600 N. May Ave., Okla. City, OK 73112		8. Farm or Lease Name Ashley Valley
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface 1268' FWL, 1773' FSL of the SW/4 (NE SE NW SW) At proposed prod. zone 4900' Weber Sandstone		9. Well No. 1
14. Distance in miles and direction from nearest town or post office* 3.4 Miles East of Naples		10. Field and Pool, or Wildcat Wildcat (001)
15. Distance from proposed location* to nearest property or lease line, ft. (Also to nearest drilg. line, if any) 1268' FWL, 1773' FSL	16. No. of acres in lease 160	11. CO, Sec., T., R., M., or Bk., and Survey or Area 34-T4S-R22E
18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. None	19. Proposed depth 4900' Weber	12. County or Parrish Uintah
21. Elevations (Show whether DF, RT, GR, etc.) 4072' (GL)		13. State Utah
20. Rotary or cable tools Rotary		22. Approx. date work will start* When Approved

## 23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
30"	20"	Conductor	60+	To Surface
12-1/4"	8-5/8"	24#	500+	To Surface
7-7/8"	5-1/2"	15.5#	4900+	250 Sx+

## EXHIBITS ATTACHED

- A. Location, Elevation, Road, Rig Layout Plats.
- B. Ten Point Plan.
- C. Blowout Preventer Diagram.

## TECHNICAL REVIEW

Engr. RB 10-16-89  
 Geol. RA 10/3/89  
 Surface BGH 10-11-89

## IMPORTANT INFORMATION

1. This is fee land.
2. This site is neither a Federal nor a State Unit.
3. Engineers in Charge of Operations:  
 David I. Allred (405) 842-2333  
 Ivan D. Allred (405) 842-2333

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. I hereby certify that this report is true and complete to the best of my knowledge.

Signed David I. Allred Title Petroleum Engineer Date 9-22-89  
 (This space for Federal or State office use)

APR NO. 43-047-31880 Approval Date \_\_\_\_\_

Approved by \_\_\_\_\_ Title \_\_\_\_\_ DATE 10-16-89  
 Conditions of approval, if any: \_\_\_\_\_

\*See Instructions On Reverse Side

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE 10-16-89  
BY John R. Bay  
WELL SPACING: RLV5-3-3

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. Lease Designation and Serial No. Fee	
b. Type of Well Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone <input type="checkbox"/>		6. If Indian, Allottee or Tribe Name -----	
2. Name of Operator BEARD OIL COMPANY		7. Unit Agreement Name -----	
3. Address of Operator Enterprise Plaza, Suite 200, 5600 N. May Ave., Okla. City, OK 73112		8. Farm or Lease Name Ashley Valley	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1268' FWL, 1773' FSL of the SW/4 (NE SE <u>NW SW</u> ) At proposed prod. zone 4900' Weber Sandstone		9. Well No. 1	
14. Distance in miles and direction from nearest town or post office* 3.4 Miles East of Naples		10. Field and Pool, or Wildcat Wildcat (0017)	
15. Distance from proposed location* to nearest property or lease line, ft. 1268' FWL, 1773' FSL (Also to nearest dric. line, if any)		11. 00. Sec., T., R., M., or B.L. and Survey or Area 34-T4S-R22E	
16. No. of acres in lease 160		12. County or Parrish Uintah	
17. No. of acres assigned to this well 40		13. State Utah	
18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. None		20. Rotary or cable tools Rotary	
21. Elevations (Show whether DF, RT, GR, etc.) 5072' (GL)		22. Approx. date work will start* When Approved	

## 23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
30"	20"	Conductor	60+	To Surface
12-1/4"	8-5/8"	24#	500+	To Surface
7-7/8"	5-1/2"	15.5#	4900+	250 Sx+

## EXHIBITS ATTACHED

- A. Location, Elevation, Road, Rig Layout Plats.  
B. Ten Point Plan.  
C. Blowout Preventer Diagram.

RECEIVED  
SEP 25 1989

DIVISION OF  
OIL, GAS & MINING

## IMPORTANT INFORMATION

- This is fee land.
- This site is neither a Federal nor a State Unit.
- Engineers in Charge of Operations:  
David I. Allred (405) 842-2333  
Ivan D. Allred (405) 842-2333

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. I hereby certify that this report is true and complete to the best of my knowledge.

Signed David I. Allred Title Petroleum Engineer Date 9-22-89  
(This space for Federal or State office use)

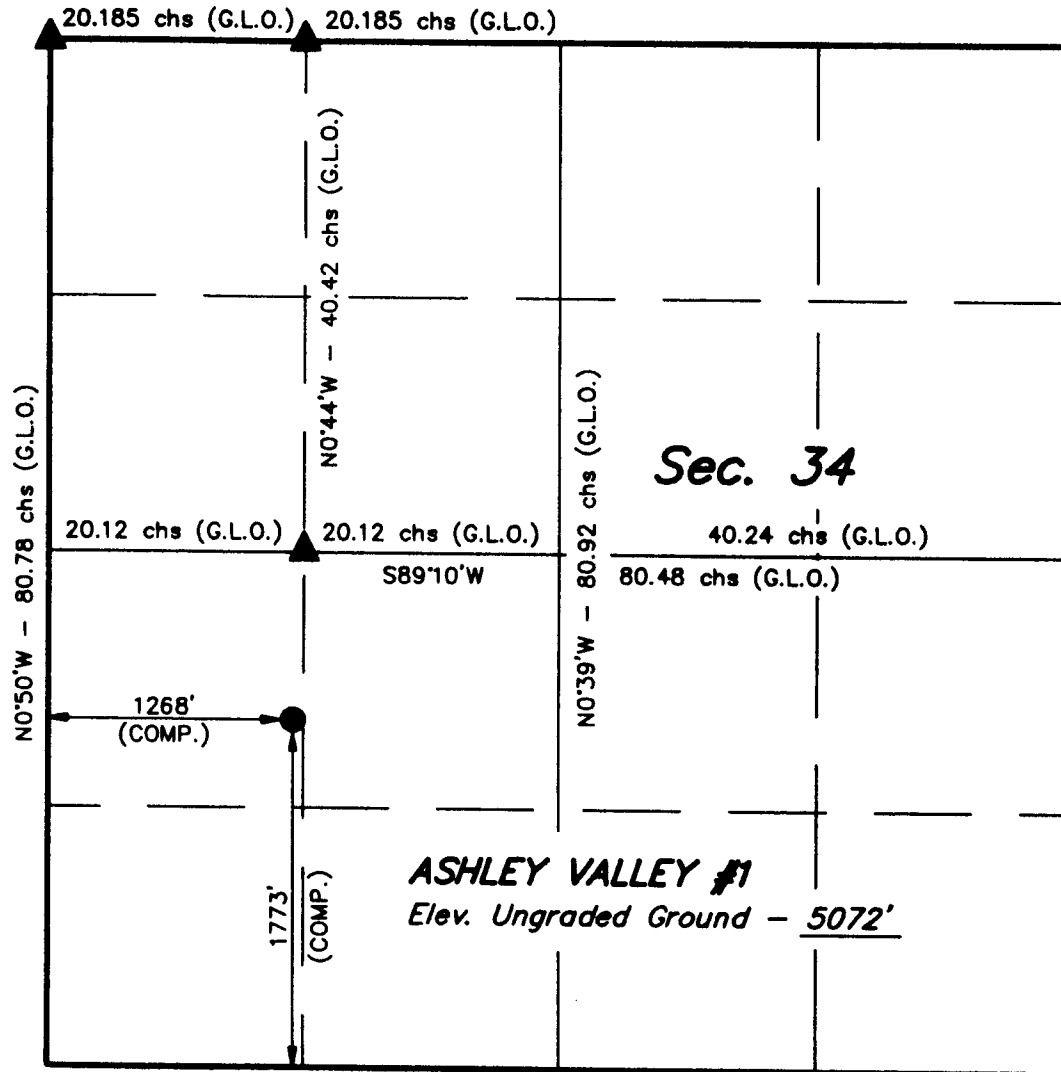
API NO. \_\_\_\_\_ Approval Date \_\_\_\_\_

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

\*See Instructions On Reverse Side

**T4S, R22E, S.L.B.&M.**

S89°04'W - 80.74 chs (G.L.O.)



▲ = SECTION CORNERS LOCATED. (Alum Caps.)

**NOTE:**

WELL LOCATION BEARS S3°01'32"W  
897.13' FROM THE C  $\frac{W \ 1/16}{34}$  C

**NOTE:**

BASIS OF BEARINGS IS THE ASSUMPTION THAT  
THE LINE BETWEEN THE NW CORNER OF SECTION  
34 AND THE C  $\frac{W \ 1/16}{34}$  C BEARS S27°18'55"E.

**BEARD OIL CO.**

WELL LOCATION, ASHLEY VALLEY #1  
LOCATED AS SHOWN IN THE NW 1/4  
SW 1/4 OF SECTION 34, T4S, R22E,  
S.L.B.&M. UTAH COUNTY, UTAH.

**BASIS OF ELEVATION**

JENSEN TRIANGULATION STATION LOCATED  
IN SECTION 26, T4S, R22E, S.L.B.&M. SAID  
ELEVATION IS MARKED AS BEING 5274 FEET.

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OIL, GAS & MINING



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT L. K...  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 5708  
STATE OF UTAH

**UTAH ENGINEERING & LAND SURVEYING**  
P. O. BOX 1768 - 86 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 9-11-89
PARTY R.L.K. T.D.H. T.D.H.	REFERENCES G.L.O. PLAT
WEATHER COOL, CLOUDY	FILE BEARD OIL CO.

## DRILLING LOCATION ASSESSMENT

### **State of Utah Division of Oil, Gas and Mining**

OPERATOR: BEARD OIL COMPANY WELL NAME: ASHLEY VALLEY #1  
SECTION: 34 TWP: 4S RNG: 22E LOC: 1268 FWL 1773 FSL  
QTR/QTR NW/SW COUNTY: UINTAH FIELD: WILDCAT  
SURFACE OWNER: ASHLEY VALLEY SEWER MANAGEMENT  
SPACING: 460 F SECTION LINE 460 F QTR/QTR LINE 920 F ANOTHER WELL  
INSPECTOR: BRAD HILL DATE AND TIME: 10/11/89 9:00 AM

PARTICIPANTS: Gil Hunt-DOGM, David Allred-Beard Oil, Coy Hatch-Ashley Valley Sewer Mgmt. Board, Harley Jackson-Jackson Const., Buck Olsen-Olsen Drilling, Bill Martin- Bill Jr Rathole Drilling

REGIONAL SETTING/TOPOGRAPHY: Eastern Ashley Valley, Mancos terraces above the valley bottom. Location lies between two sewage lagoons.

#### LAND USE:

CURRENT SURFACE USE: None

PROPOSED SURFACE DISTURBANCE: A 325'X 160' rectangular pad will be constructed with a 160'X 75' extension for the reserve pit. Approximately 1.5 miles of existing access road will be upgraded. All construction will be on acreage owned by Ashley Valley Sewer Management.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Dwarf sage and scattered dry grass/Insects and Birds

#### ENVIRONMENTAL PARAMETERS

##### **SURFACE GEOLOGY**

SOIL TYPE AND CHARACTERISTICS: Silty clay soil derived from weathered Mancos Shale Fm.

SURFACE FORMATION & CHARACTERISTICS: Mancos Shale Formation Consists of soft easily-weathered mudstones.

EROSION/SEDIMENTATION/STABILITY: No active erosion or sedimentation at this time. A disturbed surface could be easily eroded by a heavy rainstorm.

PALEONTOLOGICAL POTENTIAL: None observed.

##### **SUBSURFACE GEOLOGY**

OBJECTIVES/DEPTHS: Weber Sandstone-4570'

ABNORMAL PRESSURES-HIGH AND LOW: None anticipated.

CULTURAL RESOURCES/ARCHAEOLOGY: NA

CONSTRUCTION MATERIALS: Mostly onsite materials will be used. Some gravel will be hauled in for road surfacing.

SITE RECLAMATION: If the well is abandoned the site will be reclaimed as per landowner request.

RESERVE PIT

CHARACTERISTICS: The reserve pit will be rectangular in shape. Approximate dimensions will be 160'X 75'X 8'.

LINING: No lining will be required. The Mancos Shale, that the pit will be constructed in, should adequately contain all drilling fluids.

MUD PROGRAM: 0-500'/Low solids, non-dispersed Mud Wt.-8.3-8.7  
500-4900'/chemical mud Mud Wt. 8.8

DRILLING WATER SUPPLY: To be purchased from Ashley Valley Sewer Management.

OTHER OBSERVATIONS

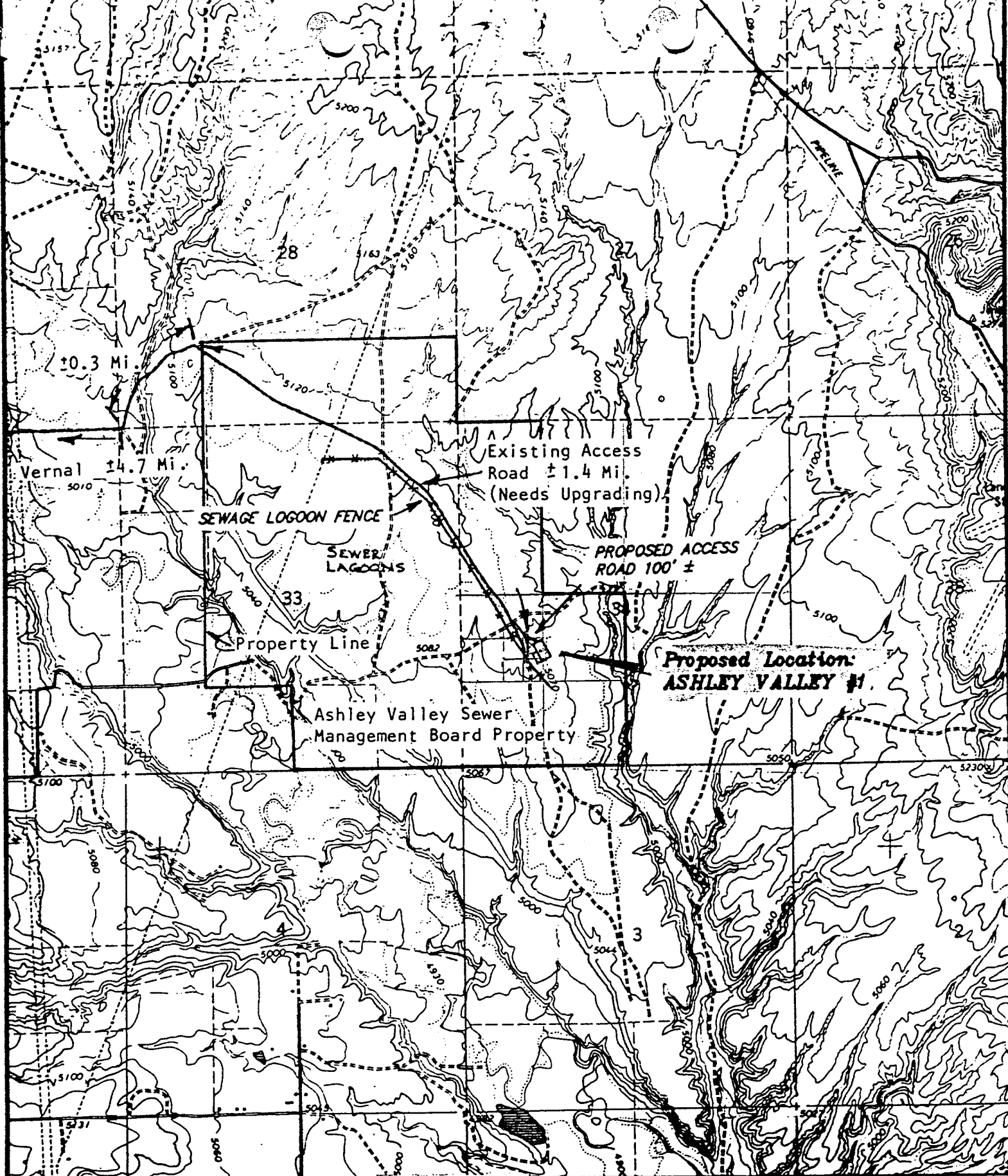
Beard oil is requesting an exception for this location. The well has been staked between two Ashley Valley Sewer ponds with no way to move but north. However it is the east-west location which is the reason for the exception. The location cannot be moved in this direction.

STIPULATIONS FOR APD APPROVAL

None



**EXHIBIT A**



TOPOGRAPHIC MAP "B"

SEP 25 1951



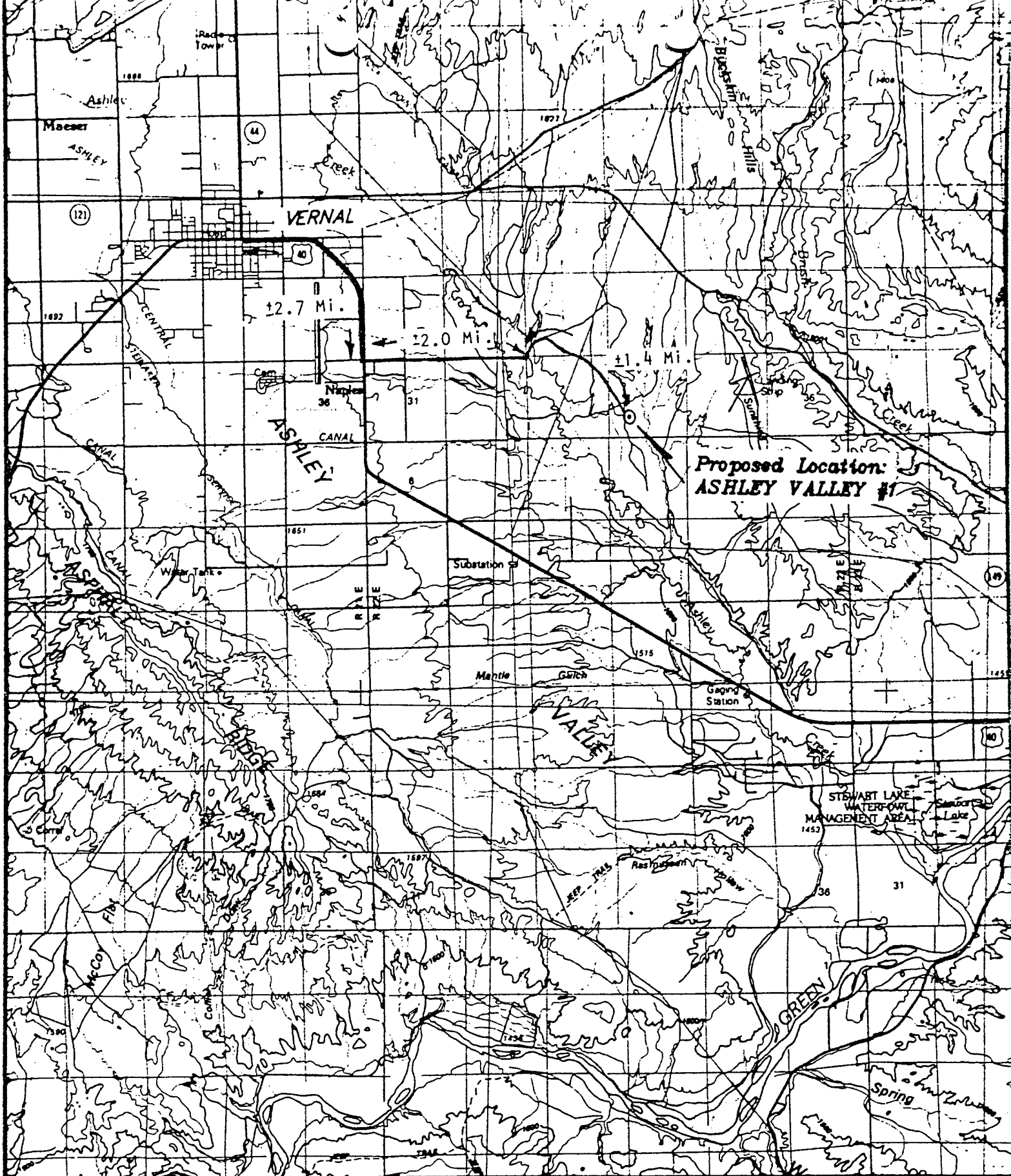
SCALE: 1" = 2000'

DIVISION OF  
OIL, GAS & MINING

BEARD OIL CO.

ASHLEY VALLEY #1

SECTION 34, T4S, R22E, S.L.B.&M.



TOPOGRAPHIC  
MAP "A"

SEP 20 1939

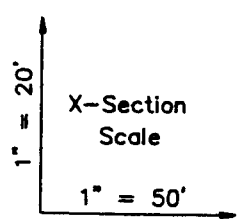
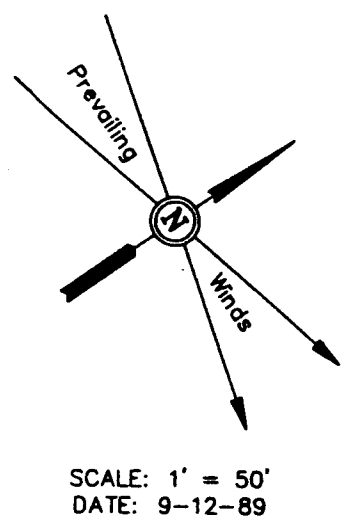
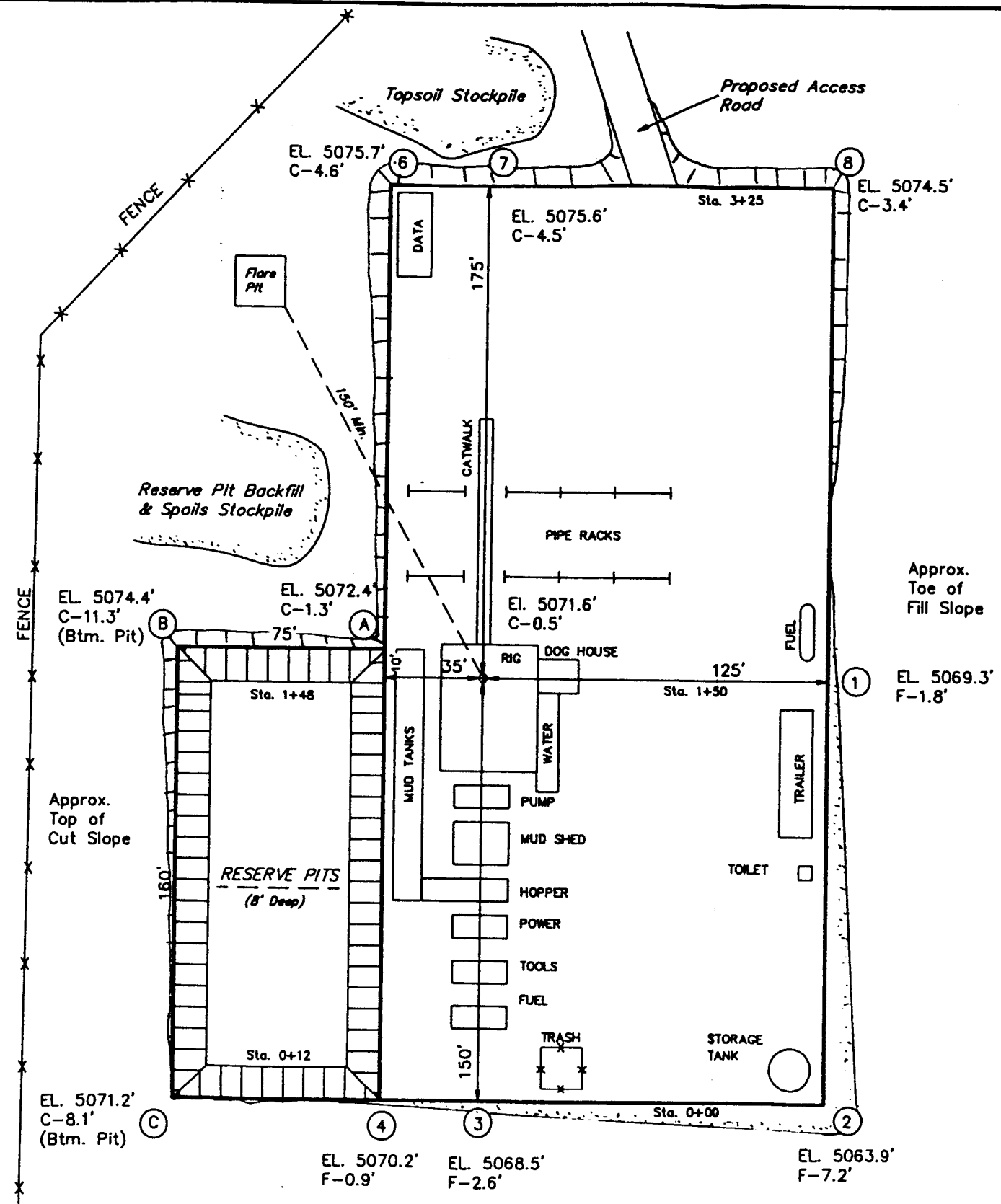
BEARD OIL CO.  
ASHLEY VALLEY #1  
SECTION 34, T4S, R22E, S.L.B.&M.

BEARD OIL CO.

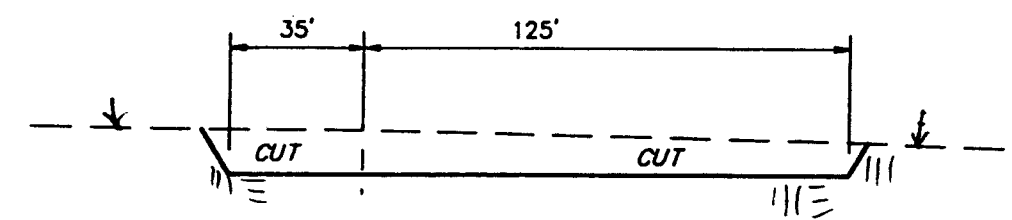
ASHLEY VALLEY #1

SECTION 34, T4S, R22E, S.L.B.&M.

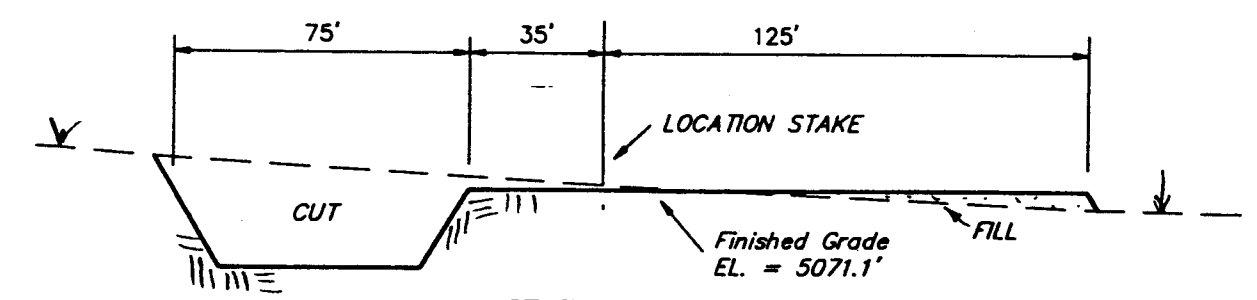
**BEARD OIL CO.**  
**LOCATION LAYOUT FOR**  
**ASHLEY VALLEY #1**  
**SECTION 34, T4S, R22E, S.L.B.&M.**



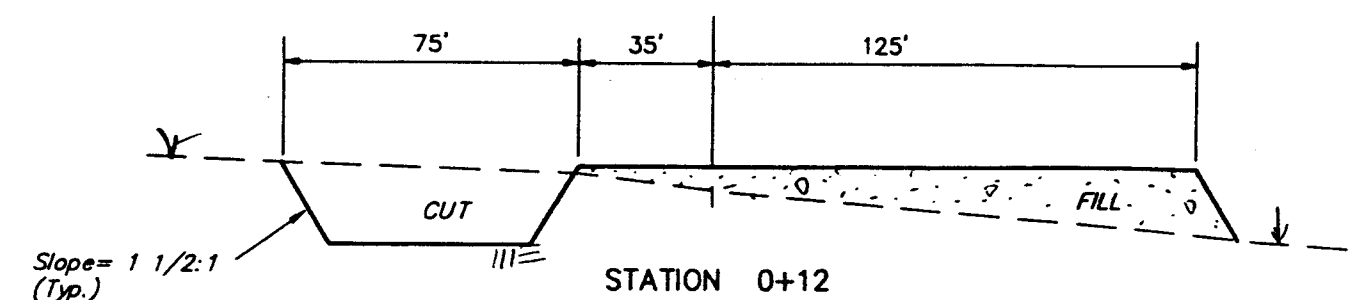
**TYP. CROSS SECTIONS**  
**TYP. LOCATION LAYOUT**



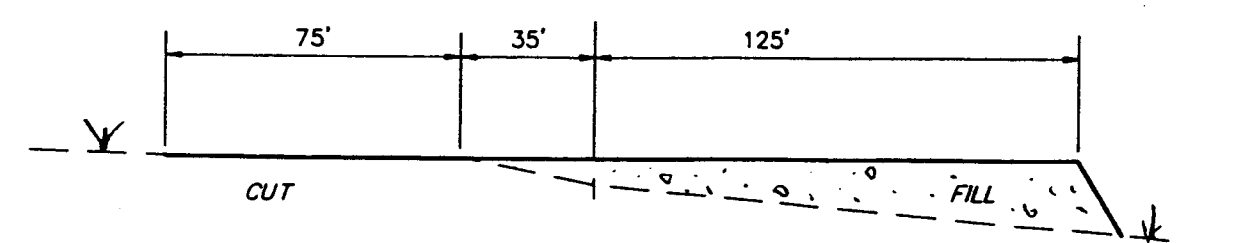
**STATION 3+25**



**STATION 1+50**



**STATION 0+12**



**STATION 0+00**

**APPROXIMATE YARDAGES**

<b>CUT</b>		<b>EXCESS MATERIAL AFTER 5% COMPACTION</b>	
(6") Topsoil Stripping	= 1,185 Cu. Yds.	Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,566 Cu. Yds.
Pit Volume (Below Grade)	= 2,763 Cu. Yds.	EXCESS UNBALANCE (After Rehabilitation)	= 340 Cu. Yds.
Remaining Location	= 2,239 Cu. Yds.		
<b>TOTAL CUT</b>	<b>= 6,187 CU.YDS.</b>		
<b>FILL</b>	<b>= 3,117 CU.YDS.</b>		

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**SEP 25 1989**

**UINTAH ENGINEERING & LAND SURVEYING**  
P.O. Box 1758 Vernal, Utah

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DIVISION OF  
OIL, GAS & MINING

**EXIBIT B**

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SEP 25 1989

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM

DIVISION OF  
OIL, GAS & MINING

Company: Beard Oil Company  
Well: Ashley Valley #1  
Well Location: 1268' FWL, 1773' FSL of the SW/4  
Section 34, T. 4 S., R. 22 E.  
County: Uintah  
State: Utah

1. GEOLOGIC SURFACE FORMATION

Duchesne

2. ESTIMATED IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>Depth</u>
Mancos Shale	40'
Frontier Sandstone	870'
Dakota Sandstone	1205'
Navajo Sandstone	2295'
Moenkopi Redbeds	3665'
Phosphoria Lime	4400'
Weber Sandstone	4570'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

Weber Sand 4570' - Possible Oil, Gas  
or Salt Water

4. PROPOSED CASING PROGRAM

<u>Size</u>	<u>Grade</u>	<u>Wt./Ft.</u>	<u>Condition</u>	<u>Depth Set</u>
20"	Conductor		New	60'
8-5/8"	J-55	24#	New	500'
5-1/2"	J-55	15.5#	New	4,900'

**EXHIBIT "B" - Page - 2 -**

Beard Oil Company Ashley Valley #1  
1268' FWL, 1773' FSL of the SW/4  
Section 34, T. 4 S., R. 22 E  
Uintah County, Utah

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OIL, GAS & MINING

**5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL**

**Well Control Equipment:**

1. NU 10" 3000 psi hydraulic double-ram BOP w/Hydrill and remote closing unit. Test BOP and surface casing to 1000 psi at NU.
2. Operate BOP daily and on each trip.
3. Install and maintain kelly-cock. Test at NU.
4. Install 2000 psi WP choke manifold. Test valves to 1000 psi at NU.
5. Keep inside BOP available on floor at all times.

**6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATING MUDS**

**Mud Program:**

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Vis</u>	<u>WL</u>	<u>Other</u>
0-0500'	Lo Solids, Non-dispersed	8.3-8.7	26-29	NC	
0500-4900'	Chemical	8.8-8.8	35-50	10-15	Lubricant & LCM

A reserve pit will be used.

**7. AUXILIARY EQUIPMENT TO BE USED**

1. A kelly cock will be kept in the string.
2. A De-gasser will be installed if needed.
3. Install a one-man mud-logging unit at 2500'.

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SEP 25 1939

DIVISION OF  
OIL, GAS & MINING

**EXHIBIT "B" - Page - 3 -**

Beard Oil Company Ashley Valley #1  
1268' FWL, 1773' FSL of the SW/4  
Section 34, T. 4 S., R. 22 E.  
Uintah County, Oklahoma

**8. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED**

1. Rig Samples every 10' from 2,500' to Total Depth, or as directed by the wellsite geologist.
2. No cores are planned.
3. Possible Drill Stem Test.
4. Dual Induction Log from surface casing to Total Depth. DNL-FDC with GR-FDC with GR-Caliper, Microlog, as directed by wellsite geologist.

**9. ANY ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED**

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area, nor at the depths anticipated in this well. A pressure gradient of 0.42 psi/ft is anticipated.

No hydrogen sulfide or other hazardous fluids or gases have been found, reported, or known to exist at these depths in the area.

**10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS**

The anticipated starting date is set for as soon as possible after examination and approval of all drilling requirements.

The operations should be completed within 30 days after spudding the well.



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SEP 25 1939

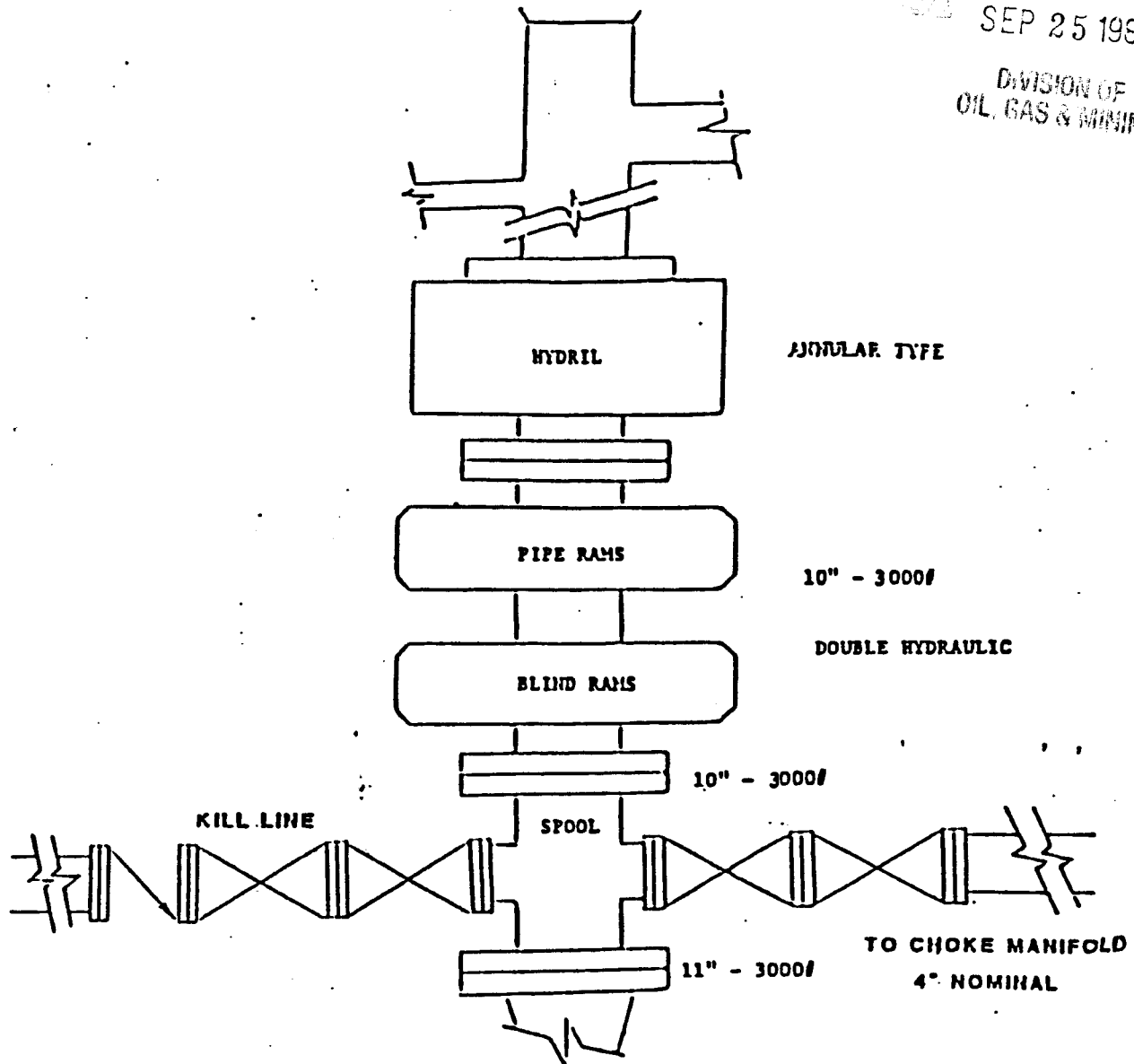
DIVISION OF  
OIL, GAS & MINING

**EXHIBIT C**

Ashley Valley #1

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SEP 25 1989

DIVISION OF  
OIL, GAS & MINING



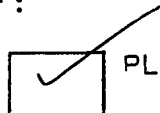
BOP DIAGRAM

OPERATOR Beard Oil Company DATE 9-27-89  
WELL NAME Ashley Valley #1  
SEC NWSW 34 T 4S R 22E COUNTY Wintah

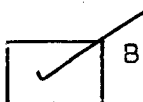
43-047-31880  
API NUMBER

Fee  
TYPE OF LEASE

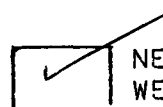
CHECK OFF:



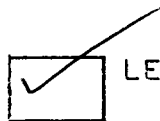
PLAT.



BOND



NEAREST  
WELL



LEASE



FIELD



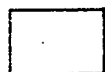
POTASH OR  
OIL SHALE

PROCESSING COMMENTS:

No other well within 920' RDOC / Process 10-12-89  
Need Water Permit  
Request for exception location on letter dated 9-22-89.  
Brad Hill - Presite / Received 10-13-89 Dan Jarvis - UIC 10-3-89  
Bond will be taken care of ASAP / Received 10-5-89

APPROVAL LETTER:

SPACING:



R615-2-3

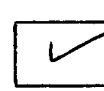
N/A



R615-3-2



N/A  
CAUSE NO. & DATE



R615-3-3

STIPULATIONS:

1. Water Permit  
2. (See Dan's Note)  
3. Fee Land Stipulation (copy to Bond file)

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

- 
1. ADMINISTERING STATE AGENCY  
OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)
- 
3. APPROXIMATE DATE PROJECT WILL START:  
When Approved
- 
4. AREAWIDE CLEARING HOUSE(s) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Uintah Basin Association of Governments
- 
5. TYPE OF ACTION: ☐ Lease ☒ Permit ☐ License ☐ Land Aquisition  
☐ Land Sale ☐ Land Exchange ☐ Other \_\_\_\_\_
- 
6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill
- 
7. DESCRIPTION:  
Beard Oil Company proposes to drill a wildcat well, the Ashley Valley #1, on private lease in Uintah, County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this case and must issue approval to drill before operations can commence.
- 
8. LAND AFFECTED (site location map required) (indicate county)  
NW/4, SW/4, Section 34, Township 4 South, Range 22 East, Uintah County, Utah
- 
9. HAS THE LOCAL GOVERNMENT(s) BEEN CONTACTED?  
Unknown
- 
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
Degree of impact is based on the discovery of oil or gas in commercial quantities.
- 
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:  
Carol Kubly, Vernal, 789-1388
- 
12. FOR FURTHER INFORMATION, CONTACT: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL  
John Baza  
PHONE: 538-5340  
DATE: 9/28/89  
Petroleum Engineer
-

John  
5 1/2" casing Please check cement volume on  
7 7/8" casing we need enough cement  
to circulate back to a depth of  
3665' to protect the upper sandstone  
Aquifers ie Frontier, Dakota & Navajo.  
The other alternative is to set casing below  
base of Navajo. Everything else is OK.

Dan.

10/3/89

SRB  
10-16-89

Hole size: 7 1/8"

Casing size: 5 1/2", 15.5# 5.55

From Halliburton book, volume between casing and  
hole is 0.1733 ft<sup>3</sup>/ft.

Assuming 50% excess cement in open interval and  
a cement slurry volume of 1.2 ft<sup>3</sup>/sk, amount  
of cement needed to cover from 4900' back  
to 3665' is:

$$\frac{1235 \text{ ft.} \times 0.1733 \frac{\text{ft}^3}{\text{ft}} \times 1.5}{1.2 \text{ ft}^3/\text{sk}} = \underline{\underline{268 \text{ sks of cement.}}}$$



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

October 16, 1989

Beard Oil Company  
Enterprise Plaza, Suite 200  
5600 North May Avenue  
Oklahoma City, Oklahoma 73112

Gentlemen:

Re: Ashley Valley #1 - NW SW Sec. 34, T. 4S, R. 22E - Uintah County, Utah  
1773' FSL, 1268' FWL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.
2. The operator shall cement the 5 1/2" casing string to adequately protect upper sandstone aquifers by bringing cement back to at least 3665' (top of Moenkopi). The operator should increase cement volume for the 5 1/2" casing string to approximately 300 sx. in order to ensure adequate coverage.
3. Beard Oil Company, as designated operator, is the bonded principal in reference to this Application for Permit to Drill. Should this designation change or a transfer of ownership occur, liability will remain with the designated operator until the Division is notified by letter of a new bonded principal.

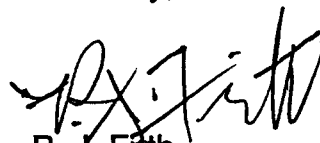
In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.

3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-047-31880.

Sincerely,



R. J. Fifth  
Associate Director, Oil & Gas

lcr  
Enclosures  
cc: Bureau of Land Management  
D. R. Nielson  
J. L. Thompson  
WE14/3-4

DIVISION OF OIL, GAS AND MINING

SPODDING INFORMATION

API NO. 43-047-31880

NAME OF COMPANY: BEARD OIL COMPANY

WELL NAME: ASHLEY VALLEY #1

SECTION NWSW 34 TOWNSHIP 4S RANGE 22E COUNTY UINTAH

DRILLING CONTRACTOR OLSEN DRILLING

RIG # 7

SPODDED: DATE 12/15/89

TIME 5:00 p.m.

How ROTARY

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY DAVID ALLRED

TELEPHONE # 801-789-9550

DATE 12/19/89 SIGNED TAS



OPERATOR Beard Oil Co.  
ADDRESS 5600 North May Ave  
Oklahoma City Oklahoma 73112

OPERATOR ACCT. NO. N  
N1295

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11045	43-047-31880	Ashley Valley #1	SW	34	4 S	22 E	Wintah	12-15-89	
WELL 1 COMMENTS: Well was spudded @ 10:00 pm 12-15-89. Ran 12-its of 8 5/8 #24 I-55 STAC to 573' KB on 6 conduits and circulated good cement to surface. NUC test BOP's next day, good test.											
WELL 2 COMMENTS: Fee-Lease Field-Wildcat Unit-N/A Proposed Zone-Webr (Assign new entity 11045 on 1-4-90) per											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED  
DEC 28 1989

DIVISION OF  
OIL, GAS & MINING

David A. Allred  
Signature  
Petroleum Engineer 12/21/89  
Title Date  
Phone No. (405) 842-2333

Dianosur Inc 789-2660  
Vernal  
Room #153  
DAVID ALLRED  
Petroleum Engineer  
Enterprise Plaza, Suite 200  
5600 North May Avenue  
Oklahoma City, Oklahoma 73112  
(405) 842-2333  
Telecopier (405) 842-9901  
Mobile (405) 375-5026  
Home (405) 348-3000

RECEIVED  
DEC 28 1939

REPORT OF WATER ENCOUNTERED DURING DRILLING - FORM 7

DIVISION OF  
OIL, GAS & MINING

1. Well name and number: Ashley Valley #1  
API number: 43-047-31886
2. Well location: QQ SW section 34 township 4S range 22E county Uintah
3. Well operator: Beard Oil Co.  
Address: 5600 North May Ave. Suite 200 phone: (405) 842-2333  
Oklahoma City, Okla. 73112
4. Drilling contractor: Olsen Drilling Co.  
Address: 999 18th St. Opp Denver Place phone: 303 292-9930  
Denver Colorado 80202

5. Water encountered (continue on reverse side if necessary)

Depth		Volume (flow rate or head)	Quality (fresh or salty)
from	to		
		No Water Encountered So far Current Depth 2186'	

OIL AND GAS

JRB

1- GUM

DTS

LS

6. Formation tops:

Manys Shale 40'  
Frederick Sand 870'  
Dakota Sand 1205'

2-TAS

3- MICROFILM

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

No Water

I certify that this report is true and complete to the best of my knowledge.

Name

Daniel S. Alford  
Title Petroleum Engineer

Signature

Date

Daniel S. Alford  
12/23/89

Comments:



BEARD OIL  
COMPANY

Dinosaur Inn  
Vernal

789-2660

Room #153

DAVID ALLRED

Petroleum Engineer

Enterprise Plaza, Suite 200

5600 North May Avenue

Oklahoma City, Oklahoma 73112

(405) 842-2333

Telecopier (405) 842-9901

Mobile (405) 375-5826 *5648*

Home (405) 348-3400 *1620*

S. OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <small>(Do not use this form for proposals to drill or to deepen or to change a different reservoir. Use "APPLICATION FOR PERMIT" for proposals.)</small>		5. LEASE DESIGNATION & SERIAL NO. <i>Free</i>																				
1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER 2. NAME OF OPERATOR <i>Beard Oil Co.</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME  																				
3. ADDRESS OF OPERATOR <i>5600 South May Ave Suite 200 Okla. City, Okla. 73112</i>		7. UNIT AGREEMENT NAME  																				
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface <i>1268' FWL, 1773 ZSL</i> At proposed prod. zone <i>Same as above</i>		8. FARM OR LEASE NAME <i>Ashley Valley</i>																				
14. API NO. <i>43-047-31880</i>		9. WELL NO. <i>1</i>																				
15. ELEVATIONS (Show whether DF, RT, GR, etc.) <i>5072 (6L)</i>		10. FIELD AND BOOL, OR WILDCAT <i>Wildcat</i>																				
16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">NOTICE OF INTENTION TO:</td> <td colspan="2" style="text-align: center;">SUBSEQUENT REPORT OF:</td> </tr> <tr> <td>TEST WATER SHUT-OFF <input type="checkbox"/></td> <td>PULL OR ALTER CASING <input type="checkbox"/></td> <td>WATER MICROFILM <input checked="" type="checkbox"/></td> <td>REPAIRING WELL <input type="checkbox"/></td> </tr> <tr> <td>FRACTURE TREAT <input type="checkbox"/></td> <td>MULTIPLE COMPLETE <input type="checkbox"/></td> <td>FRAC FILE <input checked="" type="checkbox"/></td> <td>ALTERING CASING <input type="checkbox"/></td> </tr> <tr> <td>SHOOT OR ACIDIZE <input type="checkbox"/></td> <td>ABANDON <input type="checkbox"/></td> <td>SHOOTING OR ACIDIZING <input checked="" type="checkbox"/></td> <td>ABANDONMENT* <input type="checkbox"/></td> </tr> <tr> <td>REPAIR WELL <input type="checkbox"/></td> <td>CHANGE PLANS <input checked="" type="checkbox"/></td> <td>(Other) <input type="checkbox"/></td> <td></td> </tr> </table>		NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:		TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER MICROFILM <input checked="" type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>	FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRAC FILE <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>	SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input checked="" type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>	REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) <input type="checkbox"/>		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <i>34-T45-R22E</i>
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:																				
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER MICROFILM <input checked="" type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>																			
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SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input checked="" type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>																			
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) <input type="checkbox"/>																				
APPROX. DATE WORK WILL START <i>TD ≈ 1-14-90</i>		12. COUNTY <i>Lincoln</i> 13. STATE <i>Utah</i>																				
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)																						

\* Must be accompanied by a cement verification report.

Our original APD form (Proposed depth) was filed for 4900'. The upper formations encountered thus far have been approximately 350' lower than expected. I would like to get approval for our proposed depth changed from 4900' to 5500'. This should be enough to account for any faults and lower laying units. There will be no change in casing design only to the new TD depth of 5500'.

*hank you -*

18. I hereby certify that the foregoing is true and correct.

SIGNED *David L. Alhus*

TITLE *Perforator Engineer*

DATE *12/29/89*

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

See Instructions On Reverse Side

STA. UTAH  
DIVISION OF OIL GAS AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work **DRILL** ☒ **DEEPEN** ☐ **PLUG BACK** ☐  
 b. Type of Well **Oil** ☒ **Gas** ☐ **Other** ☐  
 c. Name of Operator **BEARD OIL COMPANY**  
 d. Address of Operator **Enterprise Plaza, Suite 200, 5600 N. May Ave., Okla. City, OK 73112**  
 e. Location of Well (Report location clearly and in accordance with any State requirements.)  
 At surface **1268' FWL, 1773' FSL of the SW/4 (NE SE NW SW)**  
 At proposed prod. zone **4900' Weber Sandstone**

Letter Designation and Serial No. **Feb.**  
 6. If Indian, Alaskan or Tribe Name  
 7. Unit Agreement Name  
 8. Farm or Lease Name **Ashley Valley**  
 9. Well No. **1**  
 10. Field and Pool or Wildcat **Wildcat (001)**  
 11. Sec., T., R., N., or S., and Survey or Area **34-T4S-R22E**  
 12. County or Parish **Utah** **Utah**  
 13. State **Utah**  
 14. Distance in miles and direction from nearest town or post office **3.4 Miles East of Naples**  
 15. Distance from proposed location to nearest property or lease line, ft. **1268' FWL, 1773' FSL**  
 (Also to nearest drlg. line, if any)  
 16. No. of acres in lease **160**  
 17. No. of acres assigned to this well **40**  
 18. Proposed depth **4900' w/b**  
 19. Rotary or cable tools **Rotary**  
 20. Approx. date work will start **When Approved**

21. Elevations (Show whether DP, RT, GR, etc.) **4072' (GL)**  
 22. APPROVED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
30"	20"	Conductor	60+	To Surface
12-1/4"	8-5/8"	24#	500+	To Surface
7-7/8"	5-1/2"	15.5#	4900+	250 Sx+

EXHIBITS ATTACHED

- Location, Elevation, Road, Rig Layout Plats.
- Ten Point Plan.
- Blowout Preventer Diagram.

TECHNICAL REVIEW  
 Engr. **KB** 10-11-89  
 Geol. **JS** 10/13/89  
 Surface **BSD** 10-11-89

IMPORTANT INFORMATION

- This is fee land.
- This site is neither a Federal nor a State Unit.
- Engineers in Charge of Operations:  
 David I. Allred (405) 842-2333  
 Ivan D. Allred (405) 842-2333

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. I hereby certify that this report is true and complete to the best of my knowledge.

Signature **David I. Allred**  
 (This space for Federal or State office use)

Title **Petroleum Engineer**

Date **9-22-89**

API NO. **43-147-31880**

Approval Date

Approval by  
 Conditions of approval, if any:

Title

APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING

DATE **10-11-89**  
 BY **R. B. Bay**  
 WELL SPACING: **R/V 5-3-3**

\*See Instructions On Reverse Side

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)		5. LEASE DESIGNATION & SERIAL NO.
6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
7. UNIT AGREEMENT NAME		
8. FARM OR LEASE NAME		Ashley Valley
9. WELL NO.		1
10. FIELD AND POOL, OR WILDCAT		Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA		34-T4S-R22E
1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		
2. NAME OF OPERATOR		Beard Oil Company
3. ADDRESS OF OPERATOR		5600 North May Ave Suite 700 OKla City, 73112
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1268' FWL, 1773' FSL of the SW 1/4 At proposed prod. zone TD => 4900 Weber Sandstone		
14. API NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY
43-047-31880	5072 (GL)	Uintah
		13. STATE
		Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input checked="" type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
(Other) _____		DATE OF COMPLETION	1-15-90
APPROX. DATE WORK WILL START	1-15-90		

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Plugged Well 1-15-90

\* Must be accompanied by a cement verification report.

Formation Tops	Plug Set @	Length of Plug
① Weber SS @ 4785'	4734' - 4834'	100'
② Chinle @ 3760'	3810' - 3710'	100'
③ Surface (Bottom)	50'in - 50'out of Surface pipe	100'
④ Surface (Top)	45' @ top	45'
⑤ Surface Marker 9' above ground level w/ Well Name, Operator, Legals, Date Spudded & abandoned.		

18. I hereby certify that the foregoing is true and correct.

SIGNED

Daniel A. Ahmed

TITLE

Petroleum Engineer

DATE

1-18-90

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

RECEIVED  
**FILING FOR WATER IN THE**  
**STATE OF UTAH**  
**WATER RIGHTS**  
**APPLICATION TO APPROPRIATE WATER**  
JAN 22 1990

Rec. by \_\_\_\_\_  
Fee Rec. \_\_\_\_\_  
Receipt # \_\_\_\_\_  
Microfilmed \_\_\_\_\_  
Roll # \_\_\_\_\_

For the purpose of acquiring the right to use a portion of the appropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Title 73, Chapter 3 of the Utah Code Annotated 1953, as amended.

**WATER RIGHT NUMBER: 45 - 5380**

**APPLICATION NO. T64332**

**1. PRIORITY OF RIGHT:** December 6, 1989

**FILING DATE:** December 6, 1989

**2. OWNER INFORMATION**

Name: Ashley Valley Sewer Management Board  
Boyce Coombs Phone: (801) 789-0961  
Address: Box # 426, Vernal, UT 84078

The land is owned by the applicant(s).

**3. QUANTITY OF WATER:** 6.0 acre feet (Ac. Ft.)

**4. SOURCE:** Unnamed Wash **DRAINAGE:** Ashley Valley

**POINT(S) OF DIVERSION:**

**COUNTY:** Uintah

(1) S. 1551 feet, E. 2799 feet, from the NW Corner of Section 33,  
Township 4 S, Range 22 E, SLB&M

Description of Diverting Works: Pumps and hoses

**COMMON DESCRIPTION:** 4Mi. East of Vernal

**5. NATURE AND PERIOD OF USE**

Oil Exploration From December 6 to May 6, 1991

**6. PURPOSE AND EXTENT OF USE**

Oil Exploratio: Drilling and completion of Ashley Valley #1 oil well.

**7. PLACE OF USE**

The water is used in all or parts of each of the following legal subdivisions.

TOWN	RANGE	SEC	North East Quarter				North West Quarter				South West Quarter				South East Quarter			
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼
4 S	22 E	34										X						

All locations in Salt Lake Base and Meridian

BEARD OIL CO. 43-047-31880

**EXPLANATORY**

Appropriate

\*\*\*\*\*

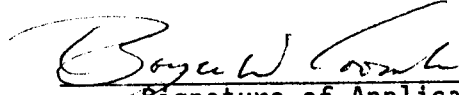
The applicant hereby acknowledges he/they are a citizen(s) of the  
United States or intends to become such a citizen.

\*\*\*\*\*

The quantity of water sought to be appropriated is limited to that which  
can be beneficially used for the purpose herein described.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/they may have been assisted in  
the preparation of the above-numbered application through the courtesy of the employees  
of the Division of Water Rights, all responsibility for the accuracy of the information  
contained therein, at the time of filing, rests with the applicant(s).

  
Signature of Applicant



# FILING FOR WATER IN THE STATE OF UTAH

Rec. by \_\_\_\_\_

Fee Rec. \_\_\_\_\_

Receipt # \_\_\_\_\_

Microfilmed \_\_\_\_\_

Roll # \_\_\_\_\_

## APPLICATION TO APPROPRIATE WATER

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Title 73, Chapter 3 of the Utah Code Annotated 1953, as amended.

WATER RIGHT NUMBER: 45 - 5380

APPLICATION NO. T64332

1. PRIORITY OF RIGHT: December 6, 1989

FILING DATE: December 6, 1989

2. OWNER INFORMATION

Name: ~~Ashley Valley Sewer Management Board~~  
Boyce Coombs Phone: (801) 789-0961  
Address: Box # 426, Vernal, UT 84078

The land is owned by the applicant(s).

3. QUANTITY OF WATER: 6.0 acre feet (Ac. Ft.)

4. SOURCE: Unnamed Wash DRAINAGE: Ashley Valley

POINT(S) OF DIVERSION:

COUNTY: Uintah

(1) S. 1551 feet, E. 2799 feet, from the NW Corner of Section 33,  
Township 4 S, Range 22 E, SLB&M

Description of Diverting Works: Pumps and hoses

COMMON DESCRIPTION: 4Mi. East of Vernal

5. NATURE AND PERIOD OF USE

Oil Exploration From December 6 to May 6, 1990

6. PURPOSE AND EXTENT OF USE

Oil Exploration: Drilling and completion of Ashley Valley #1 oil well.

7. PLACE OF USE

The water is used in all or parts of each of the following legal subdivisions.

TOWN	RANGE	SEC	North East Quarter				North West Quarter				South West Quarter				South East Quarter			
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼
4	S	22 E 34									X							

All locations in Salt Lake Base and Meridian

Beard Oil Co. - 43-047-31880

EXPLANATORY

Appropriate

\*\*\*\*\*

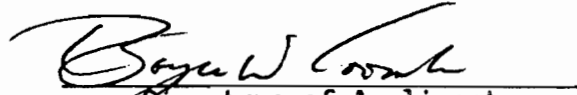
The applicant hereby acknowledges he/they are a citizen(s) of the  
United States or intends to become such a citizen.

\*\*\*\*\*

The quantity of water sought to be appropriated is limited to that which  
can be beneficially used for the purpose herein described.

\*\*\*\*\*

The undersigned hereby acknowledges that even though he/they may have been assisted in  
the preparation of the above-numbered application through the courtesy of the employees  
of the Division of Water Rights, all responsibility for the accuracy of the information  
contained therein, at the time of filing, rests with the applicant(s).

  
Signature of Applicant

STATE ENGINEER'S ENDORSEMENT

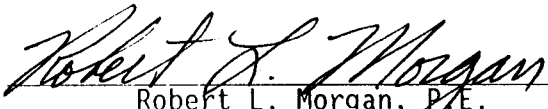
WATER RIGHT NUMBER: 45 - 5380

APPLICATION NO. T64332

1. December 6, 1989      Application received.
  2. December 6, 1989      Application designated for APPROVAL by RWL and KLJ.
  3. Comments:
- 

Conditions:

This application is hereby APPROVED, dated January 19, 1990, subject to prior rights and this application will expire on January 19, 1991.

  
Robert L. Morgan, P.E.  
State Engineer

Schlumberger

## FIELD REPORT

SWS-3660

TYPE OF SERVICE

OH-MFE

DATE

1-14-90

DISTRICT

4342

WELL OWNER: Beard Oil Co

SERVICE ORDER NUMBER: 109539

REPORTS ADDRESS: See Dist List

WELL NAME &amp; NO.: Ashley Valley #1

FIELD: W/C

LEASE:

LOCATION: SEC 34 T 45 R 22E

COUNTY: 471th

STATE: UT

☒ ONSHORE ☐ OFFSHORE ☐ INLAND WATERS☒ WILDCAT ☐ DEVELOPMENT ☐ PRODUCTION

TEST NO. 1 TEST INTERVAL FROM 4809

FT TO 4839

FT = 35

FT

## 5-30-30-60-125 SURFACE DATA

DESCRIPTION	DATE	TIME OF DAY	PRESS PSIG	SURFACE CHOKE	PRESS IN-H2O
SET PACKER	1-13-90	11:30	0	C	8"
OPENED TOOL 5 min		11:32		O	
		11:37	1 1/2	S	
CLOSED FOR INITIAL SHUT-IN 30 min		11:57	1 1/2	E	
				D	
FINISHED SHUT-IN		12:07	1 1/2		
RE-OPENED TOOL 30 min		12:07	1 1/2		
		12:12	3	C	
		12:17	4 1/2	H	
		12:27	8	4	
		12:37	12 3/4	m	
				B	
				E	
				R	
CLOSED FOR FINAL SHUT-IN 100 min		12:37	12 3/4		
FINISHED SHUT-IN		12:37	0		
PULLED PACKER LOOSE		12:40			

## EQUIPMENT SEQUENCE

COMPONENTS	SERIAL#	OD	ID	LENGTH	DEPTH
Drill pipe	4	3.340		4225	
Drill Collars	6	2 1/8		360	
Rev 546	6	2 1/4		1	
Drill Collars	6	2 1/4		90	
Rev 546	6	2 1/4		1	
Drill Collars	6	2 1/4		90	
X-over	6	2 1/4		1	
MFE-Bypass	5	1/2		1	
JAR	4 3/4	1 1/8		37	
Safety Joint	7 1/4	2 3/4		1	
Safety Seal PRR	7	1 3/8		1	
Bobtail PRR	1	1 3/8		1	
Perf	5	2 1/2		1	
Recorder	5	1 1/4		1	
Perf	5	2 1/2		35	
Recorder	5	1 1/4		1	
Perf & Bullnose	5	2 1/2		1	

JAN 22 1990

DIVISION OF  
OIL, GAS & MINING

CUSHION TYPE	LENGTH	AMOUNT	SURFACE PRESS	TEST TOOL PRESS	BOT. CHOKE SIZE
None					1/2

## SAMPLER DATA

RECOVERY	RESISTIVITY	CHL CONTENT
0 CU. FT. GAS	RECOVERED WATER 4.1 @ 60 °F	700 PPM
0 C.C. OIL	RECOVERED MUD @ °F	
2420 C.C. WATER	REC. MUD FILTRATE @ °F	
0 C.C. MUD	PIT MUD .70 @ °F	
GRAVITY °API °F	PIT MUD FILTRATE 1.5 @ °F	9000 PPM
G O R CU. FT/BBL.	SAMPLER PRESSURE 35	

## INSTRUMENT DATA

INSTRUMENT NO.	1811		1929	
CAPACITY	6400		6400	
DEPTH	4846		4853	
INSIDE-OUTSIDE	I/V		O/F	
CLOCK CAP	48		48	
TEMPERATURE °F	109		110	
I. HYD. P.S.I.G.	2336		2345	
I. FLOW P.S.I.G.	99	427	105	432
I.S.I P.S.I.G.	2058		2063	
2nd FLOW P.S.I.G.	465	1198	471	1203
2nd S.I. P.S.I.G.				
F. FLOW P.S.I.G.				
F.S.I. P.S.I.G.	2058		2063	
F. HYD. P.S.I.G.	2349		2355	

## WELL BORE DATA

FORMATION TESTED	Weber				
NET PRODUCTIVE INTERVAL	35	ft	EST. POROSITY	12	%
ELEVATION	5086	ft	DEPTH MEASURED FROM	KB	
TOTAL MEASURED DEPTH	4839	ft	TRUE VERT DEPTH	—	
O H SIZE	7 7/8	in	—		
CASING SIZE	—	in	CASING WT.	—	#/ft
LINER SIZE	—	in	LINER WT.	—	#/ft
PERF INTERVAL FROM	—	ft	TO	—	ft = —
SHOT DENSITY	—	sp/	PERF DIAMETER	—	in
TOTAL SHOTS	—	OVER/UNDER BALANCE PRESS			psi

## MUD DATA

MUD TYPE	Poly + G	MUD WT	95 #/gal
VISCOSITY	60	WATER LOSS	6 CC
RESISTIVITY: OF MUD	1.70 @ 60 °F		
: OF FILTRATE	1.75 @ 60 °F		
CHORIDES	29,000 PPM	NITRATES	PPM
H <sub>2</sub> S DURING TEST	No		PPM

REMARKS: No Fill - pulled Loose easy

RECOVERY DESCRIPTION	FEET	BBLs	% OIL	% WATER	% CUSHION	% MUD	% OTHER	API GRAV	RESIST	CHL PPM
Mud cut Formation Water w/ specks of oil	153	1.66						@ °F	@ °F	9000
Brackish Formation Water	2495	23.83						@ °F	@ °F	
Total	2648	25.49						@ °F	@ °F	
Top								@ °F	@ °F	2200
Middle								@ °F	@ °F	900
Bottom								@ °F	@ °F	700

REVERSED OUT: TIME STARTED NO

TIME FINISHED

PUMP PRESSURE

PSIG

SERVICE ORDER NUMBER: 109539

SCHLUMBERGER ENGINEER/TECHNICIAN (PRINT)

Lorin Lee

**SHADED AREAS FOR UNIT -  
FINANCIAL USE ONLY**

**Repetrol Johnston, A Division of Schlumberger Technology Corporation**  
P.O. Box 2175, Houston, Texas 77252-2175

# FIS SERVICE ORDER - TESTING

## JS-538-A

MARKETING CODE A32114	SERVICE OFF-H	DATE 1-13-90	CUSTOMER P.O. NO.	SERVICE ORDER NO. 109539 H	IS THIS A CONTINUED SERVICE ORDER? YES _____ NO <input checked="" type="checkbox"/>	PAGE 1 OF 4
--------------------------	------------------	-----------------	-------------------	-------------------------------	--	----------------

SUPERVISOR'S SIGNATURE AND ADDRESS		DATE ORDERED		CUSTOMER NAME		CUSTOMER ADDRESS	
CUSTOMER FURNISHED LEASE/WEIL INFORMATION		STATE (PROVINCE)	C. CODE	COUNTY (PARISH/BOROUGH/AREA)	RIG NAME		
LEASE		LOCATION	SEC.	FIELD	BLOCK	WELL	
PAY FOR THE SPECIFIED SERVICE(S) (INCLUDING LEASED EQUIPMENT)							

INFORMATION Acid Valley #1 SEC. 3714 R2 672  
THE UNDERSIGNED, HEREINAFTER REFERRED TO AS CUSTOMER, AGREES TO PAY FOR THE SPECIFIED SERVICE(S) (INCLUDING LEASED EQUIPMENT) AND ANY ADDITIONAL SERVICE(S) REQUESTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF FLOPETROL JOHNSTON'S CURRENT PRICE SCHEDULE.  
IF THE PRICES ARE SET OUT IN FLOPETROL JOHNSTON'S CURRENT PRICE SCHEDULE, FLOPETROL JOHNSTON AND CUSTOMER

IN CONSIDERATION OF THE PRICES AS ARE SET OUT IN FLOPETROL JOHNSTON'S CURRENT PRICE SCHEDULE, FLOPETROL JOHNSTON AND CUSTOMER CHOOSE TO BE BOUND BY THE TERMS AND CONDITIONS SET OUT ON THE REVERSE SIDE HEREOF.

CHOOSE TO BE BOUND BY THE TERMS AND CONDITIONS SET OUT ON THE REVERSE SIDE HEREOF.  
IF SIGNED BY AN AGENT ON BEHALF OF CUSTOMER SAID AGENT REPRESENTS THAT HE HAS FULL AUTHORITY FROM HIS PRINCIPAL TO EXECUTE SAME;  
IN THE ABSENCE OF AUTHORITY, THE SIGNER AGREES THAT HE SHALL BE OBLIGATED HEREUNDER AS CUSTOMER.

NAME (PRINT OR TYPE)	CITY	STATE (PROV.)	ZIP CODE

IN THE ABSENCE OF AUTHORITY, THE SIGNER AGREES THAT HE SHALL BE DEEMED REPRESENTATIVE OF THE CUSTOMER		CITY	STATE (PROV.)	ZIP CODE
CUSTOMER'S NAME	INVOICE MAILING ADDRESS - P.O. BOX OR STREET			
<i>Beard &amp; Co.</i>	<i>5600 N. May Avenue Suite 200</i>	<i>OKlahoma</i>	<i>OK</i>	<i>73112</i>
SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE	TITLE	ADDRESS (IF EXECUTED BY CUSTOMER'S REPRESENTATIVE)		

NAME: <u>David H. Wood</u>																							
HOLE TYPE <u>OH</u> <u>A</u> <u>CH</u>		LOCATION NAME: <u>Coyote</u>		LOCATION CODE: <u>4342</u>		SALESMAN: <u>Wayne Rowe</u>		1ST TRIP: <u>X</u>		SUBSEQUENT TRIP: _____		NO TRIP: _____		TOTAL JOBS ON SERVICE ORDER: _____									
COMPLETION TYPE: _____		EXPL. WELL: _____		DEV. WELL: _____		PROD./W.O. WELL: _____		OTHER (SPECIFY): _____		FLUID TYPE: OIL _____ GAS _____		OTHER (SPECIFY): <u>Wet</u>		TEST LOCATION: _____		INLAND WATER: _____ OFFSHORE: _____ LAND: <u>X</u>							
RIG TYPE: _____		FLOATER: _____		JACK-UP: _____		PLATFORM: _____		LAND: <u>X</u>		BARGE: _____		NO RIG: _____		FORMATION DATA: _____		H <sub>2</sub> S, PPM: _____		MAX BHP: _____		MAX BHT °(C): _____		FORMATION DEPTH, FT.: _____	
NON RIG: _____		SPUD: _____		LIFT BOAT: _____		PLATFORM: _____		LAND WELLHEAD: _____		HOLE OH SIZE DATA: IN. _____		CSB SIZE IN.(O.D./I.D.): <u>7 7/8</u>		LINER SIZE IN.(O.D./I.D.): _____		TUBING SIZE IN.(O.D./I.D.): <u>4 1/2</u>		DRILLERS DEPTH, FT.: _____		AVG. DEVIATION, DEG.: _____			

THE ESTIMATED CHARGES AND DATA SHOWN ARE SUBJECT TO CORRECTION BY SCHLUMBERGER-FINANCIAL DEPARTMENT.

[illegible]

THE SERVICE(S) AND/OR EQUIPMENT COVERED BY THIS SERVICE ORDER HAVE BEEN PERFORMED AS SET FORTH ABOVE.

THE SERVICE(S) AND/OR EQUIPMENT COVERED BY THIS SERVICE ORDER		SIGNATURE OF FLOPETROL JOHNSTON REPRESENTATIVE	DATE	MANAGER APPROVAL
SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE				
X <i>[Signature]</i>		X <i>[Signature]</i>	1-4-91	

**T 20666**

CHARGE TO	SALESMAN		DISTRICT		ORDERED BY		CUSTOMER P.O. NO.		DATE		
			412		Dave Allred				1 / 1		
	NAME		BEARD OIL CO.		RECEIVED JAN 22 1990 DIVISION OF OIL, GAS & MINING		LOCATION OF WELL		UT.		
	ADDRESS		621 17th St. Suite 1020				WINNEMAH COUNTY / PARISH		STATE / COUNTRY		
	CITY		STATE		ZIP		WELL NAME		WELL NUMBER		
Denver		Colo.				Aspen Valley		#1			
CUSTOMER NUMBER			STATE CODE		JOB NUMBER		RIG NUMBER				
							WIN ROCK #7				
OUT VIA:						IN VIA:					

[illegible]

Eastman Christensen agrees that it shall supply directional drilling services and/or well surveying services and/or equipment on the above identified well, which services and/or equipment shall be hereafter listed on this ticket; and customer agrees to pay for same in accordance with provisions of Eastman Christensen's General Terms and Conditions or current prices for equipment furnished by others in connection herewith. It is understood that the equipment furnished and services performed are subject to terms and conditions as set out on the reverse hereof and/or current Contract or Work Agreement.

LOST IN HOLE COVERAGE, \_\_\_\_ YES \_\_\_\_ NO

BY Donald H. Alfred CUSTOMER BY Don Bowden EASTMAN CHRISTENSEN

D-1101

Sub Total	3388.00
_____ % _____ TAX ON \$ _____	
_____ % _____ TAX ON \$ _____	
_____ % _____ TAX ON \$ _____	
TOTAL THIS TICKET	

**CUSTOMER BILLING COPY**



## WELL INFORMATION

Company Beard Oil Co.  
Contractor Win. Rock #7  
Number Ashley Valley #1  
County Uintah State Ut.  
Hole Size \_\_\_\_\_  
Formation Name Phosphoria - Weber  
Formation Disc. \_\_\_\_\_  
Mud - Wt. 9.7 Vis. 47

## EQUIPMENT

Core Barrel No. 111  
Size 6 1/4 x 4 Length 60'  
Bit No. 0115406  
Size 7 3/8 x 4 Type C-23  
Previous footage 0  
This core Core No. 1  
Total footage

## PERFORMANCE

Interval Cored — Finish 4818.5  
— Start 4806  
Footage Cored..... 12.5  
Core Recovery..... 12.5  
% Recover.....

**% Recover**.....

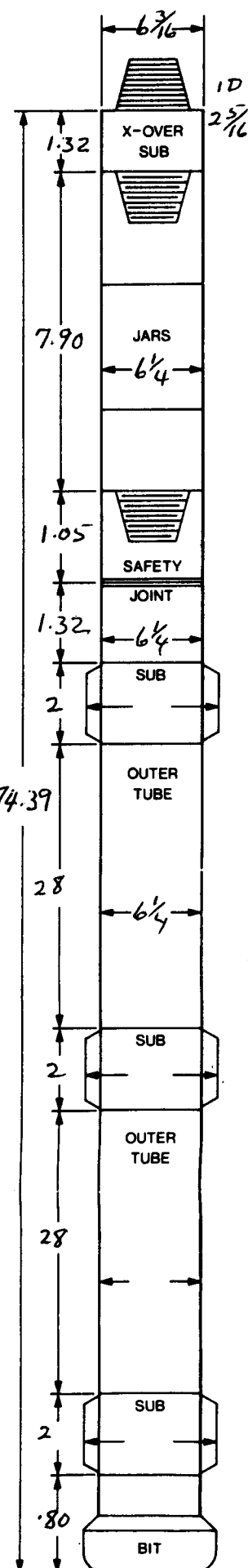
.....

.....

2012

.....Strokes...50.....

NO. FEET CORED	INTERVAL	PENETRATION RATE MINUTES PER FOOT																			OPERATING CONDITIONS		
		2	3	4	5	6	7	8	9	10	15	20	30	40	50	60	70	80	90	WEIGHT	ROTATING RPM	FLUID GPM	
0	4806	11:37																			20,000	45	250
1	7	11:52 - 15																			"		
2	8	12:07 - 15																			54		
3	9	12:21 - 14																					
4	4810	12:31 - 16																					
5	11	12:43 - 12																					
6	12	12:56 - 13																					
7	13	1:08 - 12																					
8	14	1:22 - 13																					
9	15	1:34 - 12																					
10	16	1:52 - 18																					
11	17	2:07 - 15																					
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57	63																						
58	64																						
59	65																						
60	4866																						



TREATMENT NUMBER		DATE
15-03-6615		1-15-90
TAGE	DS	DISTRICT
1-1	1-1	1-1

DOUGLAS SCHLUMBERGER INCORPORATED

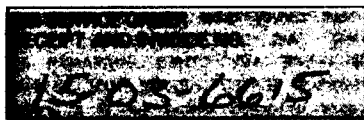
Moore® 303



# DOWELL SCHLUMBERGER INCORPORATED

P.O. BOX 4378 HOUSTON, TEXAS 77210

CUSTOMER



DSI SERVICE LOCATION NAME AND NUMBER

Vernal, Utah 1503

CUSTOMER NUMBER

CUSTOMER P.O. NUMBER

TYPE SERVICE CODE

BUSINESS CODES

295

CUSTOMER'S NAME

Beard

ADDRESS

CITY, STATE AND ZIP CODE

DSI will furnish and Customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS or DSI INDUSTRIAL SERVICE CONTRACT NO. \_\_\_\_\_ in accordance with the terms and conditions as printed on the reverse side of this form.

WORKOVER  
NEW WELL  
OTHER

☐ W  
☒ N  
☐

API OR IC NUMBER

ARRIVE LOCATION

MO. DAY YR. TIME  
1 15 90 1100

## SERVICE ORDER RECEIPT

I certify that the materials and services listed were authorized and received and all services performed in a workmanlike manner and that I have the authority to accept and execute this document.

JOB COMPLETION MO. DAY YR. TIME  
1 15 90

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE

*[Signature]*

STATE

CODE

COUNTY / PARISH

CODE

CITY

Utah

Uintah

WELL NAME AND NUMBER / JOB SITE

Ashley Valley #1

LOCATION AND POOL / PLANT ADDRESS

Sec T R

SHIPPED VIA

D/S

ITEM/PRICE REF. NO.

MATERIAL, EQUIPMENT AND SERVICES USED

UNIT

QUANTITY

UNIT PRICE

\$ AMOUNT

048256-000	Pump Charge depth 3000'	ea	1	1566 <sup>00</sup>	1566 <sup>00</sup>
048256-001	Additional Ft. Below 3000'	ft	1834	.17	311.78
059200-002	Mileage	mi	10	2.40	24.00
059697-000	PACR Cmt Recorder	ea	1	110 <sup>00</sup>	110 <sup>00</sup>
049102-000	Delivery Charge Min.	Job	1	65 <sup>00</sup>	65 <sup>00</sup>
049100-000	Service Charge	cuft	140	1.08	151.20
0410007-000	D-907 G Cement	sk	140	8.10	1134.00

Thank you

SUB TOTAL

Field Est. Less discount<sup>15</sup> \$2857.68

LICENSE/REIMBURSEMENT FEE

LICENSE/REIMBURSEMENT FEE

REMARKS:

STATE

% TAX ON \$

COUNTY

% TAX ON \$

CITY

% TAX ON \$

SIGNATURE OF DSI REPRESENTATIVE

TOTAL \$

*Joe Reese*

FIELD WILD CAT SEC. 3A TWP. 430 RNS. 22E COUNTY UNITAH STATE UTAH

WELL DATA

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	24H	8 5/8"	KB	5292	
LINER						
TUBING						
OPEN HOLE			12 1/4	KB	530	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_

FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PROD. OIL \_\_\_\_\_ SPD. WATER \_\_\_\_\_ SPD. GAS \_\_\_\_\_ MCFD

PRESENT PROD. OIL \_\_\_\_\_ SPD. WATER \_\_\_\_\_ SPD. GAS \_\_\_\_\_ MCFD

COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_

PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_

BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_

MISC. DATA \_\_\_\_\_ TOTAL DEPTH \_\_\_\_\_

## TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR 8 7/8" Baffle Plate	1ea	HALCO
FLOAT SHOE 8 7/8" SSII	1ea	HALCO
GUIDE SHOE		
CENTRALIZERS 8 7/8" - S-4	5ea	HALCO
BOTTOM PLUG		
TOP PLUG 8 7/8" SW ROBBE	1ea	HALCO
HEAD 8 7/8" KODAK MATED	1ea	HALCO
PRIMER HALCO WOOD	-	HALCO
OTHER 8 7/8" FIBER GRIP CLAMP	1ea	HALCO

## MATERIALS

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB./GAL. API

DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB./GAL. API

PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.

PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.

ACID TYPE \_\_\_\_\_ GAL. %

ACID TYPE \_\_\_\_\_ GAL. %

ACID TYPE \_\_\_\_\_ GAL. %

SURFACTANT TYPE \_\_\_\_\_ GAL. IN

NE AGENT TYPE \_\_\_\_\_ GAL. IN

FLUID LOSS ADD. TYPE \_\_\_\_\_ GAL.-LB. IN

GELLING AGENT TYPE \_\_\_\_\_ GAL.-LB. IN

FRIC. RED. AGENT TYPE \_\_\_\_\_ GAL.-LB. IN

BREAKER TYPE \_\_\_\_\_ GAL.-LB. IN

BLOCKING AGENT TYPE \_\_\_\_\_ GAL.-LB.

PERFPAC BALLS TYPE \_\_\_\_\_ QTY.

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

## JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 12/16	DATE 12/16	DATE 12-17	DATE 12-17
TIME 1630	TIME 1800	TIME 0255	TIME 0316

## PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
B. WINTER	37280 WJ	
E. DANCIC	SDA14-72616 RCM	Uernal
L. HALL	3779 RCM	
	7645	
	35205 P.W.	

DEPARTMENT CEMENTING SERVICES

DESCRIPTION OF JOB

8 7/8" SURFACE CASINGJOB DONE THRU: TUBING ☐ CASING ☒ ANNULUS ☐ TBO./ANN. ☐CUSTOMER  
REPRESENTATIVEHALLIBURTON  
OPERATORCOPIES  
REQUESTED

## CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	350	II			P	2% CASH, 1/4# Flocc / 10	1.18	15.6

## PRESSURES IN PSI

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_

BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_

SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_

## HYDRAULIC HORSEPOWER

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_

AVERAGE RATES IN BPM

TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_

CEMENT LEFT IN PIPE

FEET \_\_\_\_\_ REASON \_\_\_\_\_

## SUMMARY

PRESLURRY: BBL.-GAL. 10 TYPE FRESH

LOAD & SKID: BBL.-GAL. \_\_\_\_\_ PAD: BBL.-GAL. \_\_\_\_\_

TREATMENT: BBL.-GAL. \_\_\_\_\_ DISPL: BBL.-GAL. 31 1/2

CEMENT SLURRY: BBL.-GAL. 73 1/2

TOTAL VOLUME: BBL.-GAL. \_\_\_\_\_

## REMARKS

This well "Tight Hole"

[illegible]

# HALLIBURTON SERVICES

## JOB LOG

WELL NO. #1 LEASE ASHLEY VALLEY TIERCE NO. 841417  
 CUSTOMER BEARD OIL COMPANY PAGE NO. 1  
 JOB TYPE 38" SURFACE CASING DATE 12/16/09

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1630							CALL OUT
	1600							ON LOCATION - Rig Up
12-16-09	2300							Safety meeting
12-17-09	0200							Circ. w/ Rig pump
	0250							R.U. TO CEMENT
①	0255	3-4	0				100	FRESH H <sub>2</sub> O Added
②	0258	4	10				- 0 -	END FRESH H <sub>2</sub> O
③	0300							START MIXING 350 SK LIT + ADD 15 GALL
④	0302	4-5	0				150	START PUMPING CEMENT
⑤	0320		7 1/2				50	END CEMENT
⑥	0320							DRAG TOP plug 500 Rubber
⑦	0320	2 1/2	0				- 0 -	Displace w/ FRESH H <sub>2</sub> O
⑧	0333	1	31 1/2				150 / 250	Pump plug
⑨	0336						- 0 -	Release psi - Check Flow - Hold
⑩	0336							END JOB
								* Recovered good CEMENT, returned to surface.

Thank you  
 D. Lee / crew

CUSTOMER

12

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NO.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒

7. UNIT AGREEMENT NAME

1b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐

8. FARM OR LEASE NAME

2. NAME OF OPERATOR

9. WELL NO.

3. ADDRESS OF OPERATOR

10. FIELD AND POOL, OR WILDCAT

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

At surface 1268 FWL, 1773' FSL of the SW/4

At top prod. interval reported below

At total depth

14. API NO.

DATE ISSUED

12. COUNTY

13. STATE

15. DATE SPUDDED

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DF, REB, RT, GR, ETC.)

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD &amp; TVD

21. PLUG BACK T.D., MD &amp; TVD

22. IF MULTIPLE COMPL. HOW MANY

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)

25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN

WAS WELL CORED YES ☒ NO ☐ (Submit analysis)DRILL STEM TEST YES ☒ NO ☐ (See reverse side)

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	523'	12 1/4	Cement of Surface	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

Well plugged 1-15-90

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED

33.

DATE FIRST PRODUCTION

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Cement, DST, Core, logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE

DATE 1-18-90

See Spaces for Additional Data on Reverse Side

## WELL HISTORY

PAGE -14-

BEARD OIL COMPANY, ASHLEY VALLEY #1  
1268' FWL & 1773' FSL (NE SE NW SW)  
OF THE SW SECTION 34-4S-22E  
UINTAH COUNTY, UTAH

BOC: 33.3333 BCP  
BOC: 50.0000 ACP  
AFE PWC: \$503,120  
AFE DHC: \$271,250

CONTRACTOR: WIN-ROCK DRLG.CO., RIG #7  
ELEVATION: 5072' GL; 5086' KB  
4900' WEBER SAND TEST

01-15-90: 31 DFS. Depth: 4910' TD. Made: 43'. PO: TIH.  
Fmn: Weber. Bit #6 out @ 4910', ftg: 92'/14  
hrs, 6.5'/per hr, cond: 2-1-I. Hookload  
115,000, WOB 35-40, RPM 60-70, SPM 60, PP 900,  
6.87 BPM, 284 GPM, MW 9.4, vis 58, WL 5.8, PV  
21, YP 16, gels 3 & 14, Ph 10.0, FC 1, sd 1/8,  
solids 7, alk 2.1, Cl 12,000. Bottom hole  
assembly: 1 bit, 1 3 point, 1 IBS, 1 short DC,  
1 IBS, 1 6" DC, 1 IBS, 19 6" DC's, 1 Key Seat  
wiper, 1 cross over sub. 100% sd. BDT: 7 1/2  
hrs drlg; 3 hrs trip; 2 1/2 hrs circ; 11 hrs  
logging. DWC: \$21,591 CWC: \$263,020.

01-16-90: 32 DFS. Depth: 4910' TD. Well P & A'd. Cmtd by  
Dowell. Rig released @ 12 midnight 1-16-90.  
BDT: 3 hrs trip; 8 1/2 hrs LDDP & DC's; 1 1/2  
hrs RU cementers & LD crew; 4 1/2 hrs ND &  
clean mud tanks. Plugged as follows: 1st plug:  
4734-4834', 100', Class "G" cmt 7.5 bbls,  
density 8.5, cmt yield 1.15 cf/sx, 38 sx. 2nd  
plug: 3810-3710', 100', Class "G" cmt 7.5 bbls,  
density 8.5, cmt yield 1.15 cf/sx, 38 sx. 3rd  
plug: 50' in 50' out @ surf csg @ 530', Class  
"G" cmt 6 bbls, density 8.5, cmt yield 1.15  
cf/sx, 30 sx. 4th plug: 50' @ top of surf,  
Class "G" cmt 3 bbls, density 8.5, cmt yield  
1.15 cf/sx, 15 sx. Formation water analysis:  
2137 ppm TDS, 1836 ppm NaCl equivalent, 3.6  
ohms @ 60°F (calculated). DWC: \$10,000 CWC:  
\$273,020.

Electric Log Tops:

K Frontier	1150' (+3936)
K Mowry	1363' (+3723)
K Dakota	1496' (+3590)
J Morrison	1572' (+3514)
J Curtis	2364' (+2722)
J Entrada	2530' (+2556)
J Carmel	2790' (+2296)
J Navajo	2912' (+2174)

WELL HISTORY

PAGE -15-

BEARD OIL COMPANY, ASHLEY VALLEY #1  
1268' FWL & 1773' FSL (NE SE NW SW)  
OF THE SW SECTION 34-4S-22E  
UINTAH COUNTY, UTAH

BOC: 33.3333 BCP  
BOC: 50.0000 ACP  
AFE PWC: \$503,120  
AFE DHC: \$271,250

CONTRACTOR: WIN-ROCK DRLG.CO., RIG #7  
ELEVATION: 5072' GL; 5086' KB  
4900' WEBER SAND TEST

01-16-90: Electric Log Tops:  
(CONT'D.)

T Chinle	3760' (+1326)
T Shinarump	3878' (+1208)
T Moenkopi	3990' (+1096)
P Park City	4664' (+422)
TP Weber	4785' (+302)
<u>FINAL REPORT.</u>	



Geoscience Services

Terra Tek Core Services

**Final Report  
Routine Core Analysis Results**

**BEARD OIL COMPANY**

**Beard Ashley Valley No. 1 Well  
Uintah County, Utah**

**TTCS File No. 5529**

**CORE INTERVAL SUMMARY**

<b><u>Core No.</u></b>	<b><u>Interval</u></b>	<b><u>Formation</u></b>
<b>1</b>	<b>4806.0 - 4817.8</b>	<b>Weber Sandstone</b>



# TerraTek

Geoscience Services

Terra Tek Core Services

January 23, 1990

Beard Oil Company  
5600 North May Avenue  
Suite 200  
Oklahoma City, OK 73112

Attn: Mr. Martin Pruatt

Subject: Routine Core Analysis Results; Beard Ashley Valley No.  
1 Well; Uintah County, Utah; TTCS File No. 5529

Dear Mr. Pruatt:

Diamond coring equipment and water base mud were used in the Beard Ashley Valley No. 1 Well to obtain a 4.0-inch diameter core from the interval and formation listed on the preceding page. A representative of TerraTek Geoscience Services was at the wellsite to retrieve, preserve, and prepare the core for transport to the TerraTek laboratory in Salt Lake City, Utah. The residual fluids were preserved by wrapping the core with plastic wrap.

After the core arrived at the laboratory and was depreserved, a core gamma log was recorded. Samples were selected for analysis from each foot of core. Residual fluid saturations were determined using the controlled temperature retort extraction technique on 100-gram crushed samples. Companion plug samples were drilled from the core using water as the bit coolant and used for porosity and permeability measurements. Porosities were determined by measuring bulk volumes in a mercury pycnometer by Archimedes' principle and grain volumes in a helium expansion porosimeter by Boyle's law. Permeabilities to nitrogen gas were measured in a Hassler sleeve using an orifice-equipped pressure transducer to monitor downstream flow.

A plot of the total gamma ray activity appears on the enclosed Teklog along with plots of grain density, permeability, porosity, and residual fluid saturations. The results of the measurements described above are tabulated following the Teklog plot. A permeability versus porosity crossplot is included at the end of this report.

BEARD OIL COMPANY  
PAGE 2

The core remains at our laboratory awaiting instructions from you as to the final disposition. We sincerely appreciate this opportunity to be of service and look forward to working with you again on future projects.

Best regards,

*Kevin R. Francis*

Kevin R. Francis  
Data Evaluator

KRF/tjs

**Final Distribution List**

**BEARD OIL COMPANY**

**Beard Ashley Valley No. 1 Well  
Uintah County, Utah**

**TTCS File No. 5529**

**6 COPIES SENT TO:**

**BEARD OIL COMPANY  
5600 North May Avenue  
Suite 200  
Oklahoma City, OK 73112**

**ATTN: Martin Pruatt**

**3 COPIES SENT TO:**

**EXXON COMPANY, U.S.A.  
P.O. Box 120  
Denver, CO 80201**

**ATTN: S.W. Allison**

# TERRA TEK CORE SERVICES

360 Wakara Way, SLC Utah 84108 (801) 584-2480

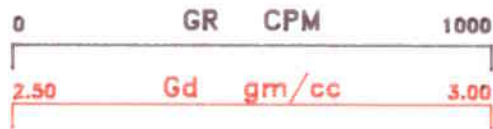
BEARD OIL COMPANY

Beard Ashley Valley No. 1 Well

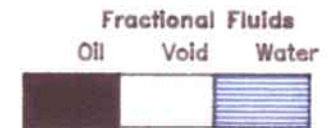
January 23, 1990

TTCS# 5529-100

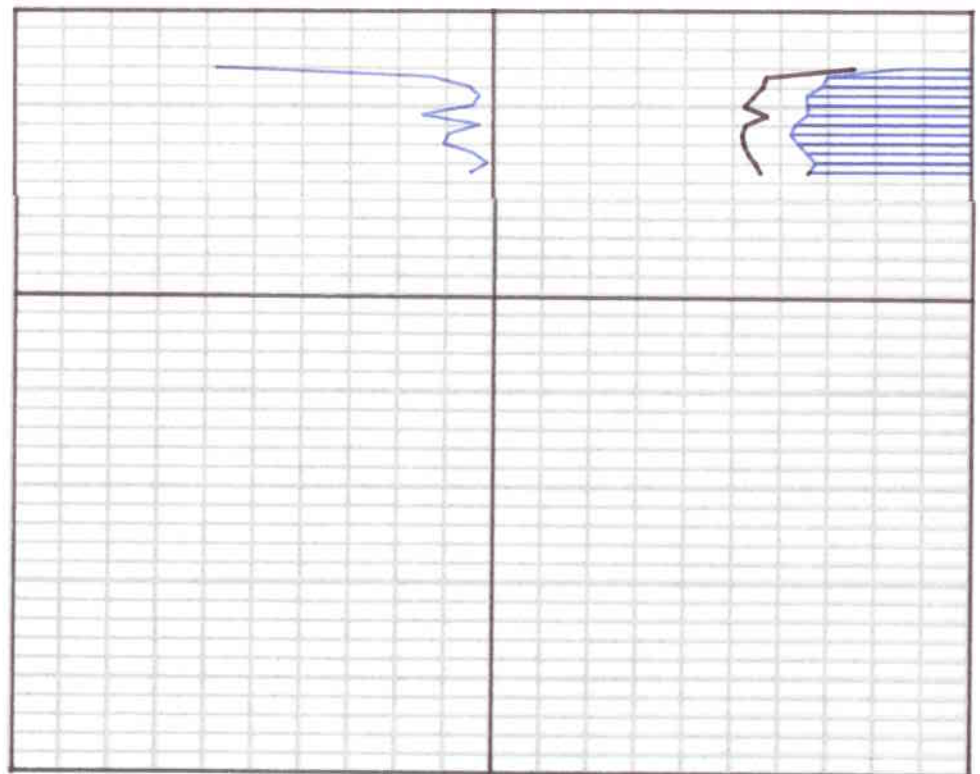
## TEKLOG



4800



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# TerraTek Core Services, Inc.®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

## BEARD OIL COMPANY

Well: Beard Ashley Valley No. 1  
Field: Wildcat  
Drilling fluid: Water Base

State: Utah  
County: Uintah  
Location: Sec. 34-T4S-R22E

Date: 23-JAN-1990  
ITCS File #: 5529  
Elevation:

## RETORT ANALYSIS - BOYLE'S LAW POROSITY

Sample Number	Depth (feet)	Permeability		Porosity %	Saturation		Grain Density (gm/cc)	Lithology
		Horz (md)	Vert (md)		Oil %	H2O %		
Weber Sandstone								
1	4806.0-07.0	.05		6.1	0.0	58.5	2.66	Sd,vfg,slty,sl/pyr
2	4807.0-08.0	3.0		10.8	0.0	70.5	2.64	Sd,fg
3	4808.0-09.0	6.2		10.9	0.0	71.8	2.64	Sd,fg
4	4809.0-10.0	7.6		11.4	0.0	76.2	2.65	Sd,fg
5	4810.0-11.0	6.6		11.9	0.0	72.3	2.64	Sd,fg
6	4811.0-12.0	2.5		10.7	0.0	80.9	2.65	Sd,vf-fg,slty
7	4812.0-13.0	7.6		11.8	0.0	78.3	2.64	Sd,fg
8	4813.0-14.0	4.2		12.0	0.0	79.2	2.65	Sd,vf-fg,slty
9	4814.0-15.0	3.8		11.9	0.0	76.5	2.65	Sd,vf-fg,slty
10	4815.0-16.0	6.8		11.7	0.0	74.2	2.64	Sd,vf-fg,slty
11	4816.0-17.0	8.9		11.3	0.0	72.4	2.65	Sd,vf-fg
12	4817.0-17.8	6.4		11.0	0.0	77.3	2.65	Sd,vf-fg

# KEY TO LITHOLOGICAL ABBREVIATIONS

Anhy - Anhydrite/anhydritic	g - grain	pyr - pyrite/pyritic
arg - argillaceous	glauc - glauconitic	qtz - quartz
Ark - Arkosic	Gyp - Gypsum	Sd - Sand/Sandstone
Bent - Bentonite	hal - halite	sdY - sandy
biot - bioturbated	hem - hematite	Sh - Shale
brec - brecciated	incl - inclusions	shy - shaley
c - coarse	Ign - Igneous	sid - siderite
calc - calcareous	lam - laminations	sil - siliceous
carb - carbonaceous	lig - lignite/lignitic	sl/ - slightly
ccf - calcite fill fracture	lmy - limy	Sltst - Siltstone
Cgl - Conglomerate/ conglomeratic	Ls - Limestone	slty - silty
chky - chalky	m - medium	stk - streak (s)
Cht - Chert	mica - micaceous	sty - stylolite
chty - cherty	Ms - mudstone	suc - sucrosic
clY - clay/clayey	nod - nodules	Tuff - Tuff
Dol - Dolomite/Dolomitic	ool - oolitic	v/ - very
f - fine	org - organic	vc - very coarse
fis - fissures	pbl - pebbles	VF - vertical fracture
fos - fossiliferous	pel - peloids	vf - very fine
frac - fractures	pis - pisolites/pisolitic	vgs - vugs
	pp - pinpoint	vgy - vuggy
		xl - crystalline

# TerraTek Core Services, Inc.®

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

## HORIZONTAL PERMEABILITY VS POROSITY

### BEARD OIL COMPANY

Beard Ashley Valley No. 1 Well  
Wildcat  
Uintah County, Utah  
January 23, 1990

Depth Interval: 4806.0 to 4817.8 Feet

TICS# 5529-100

Porosity ( $\phi$ ),

Min	Max	Average
6.134	12.015	10.971

Permeability (Kh), md

Min	Max	Geo. Ave
0.049	8.886	3.637

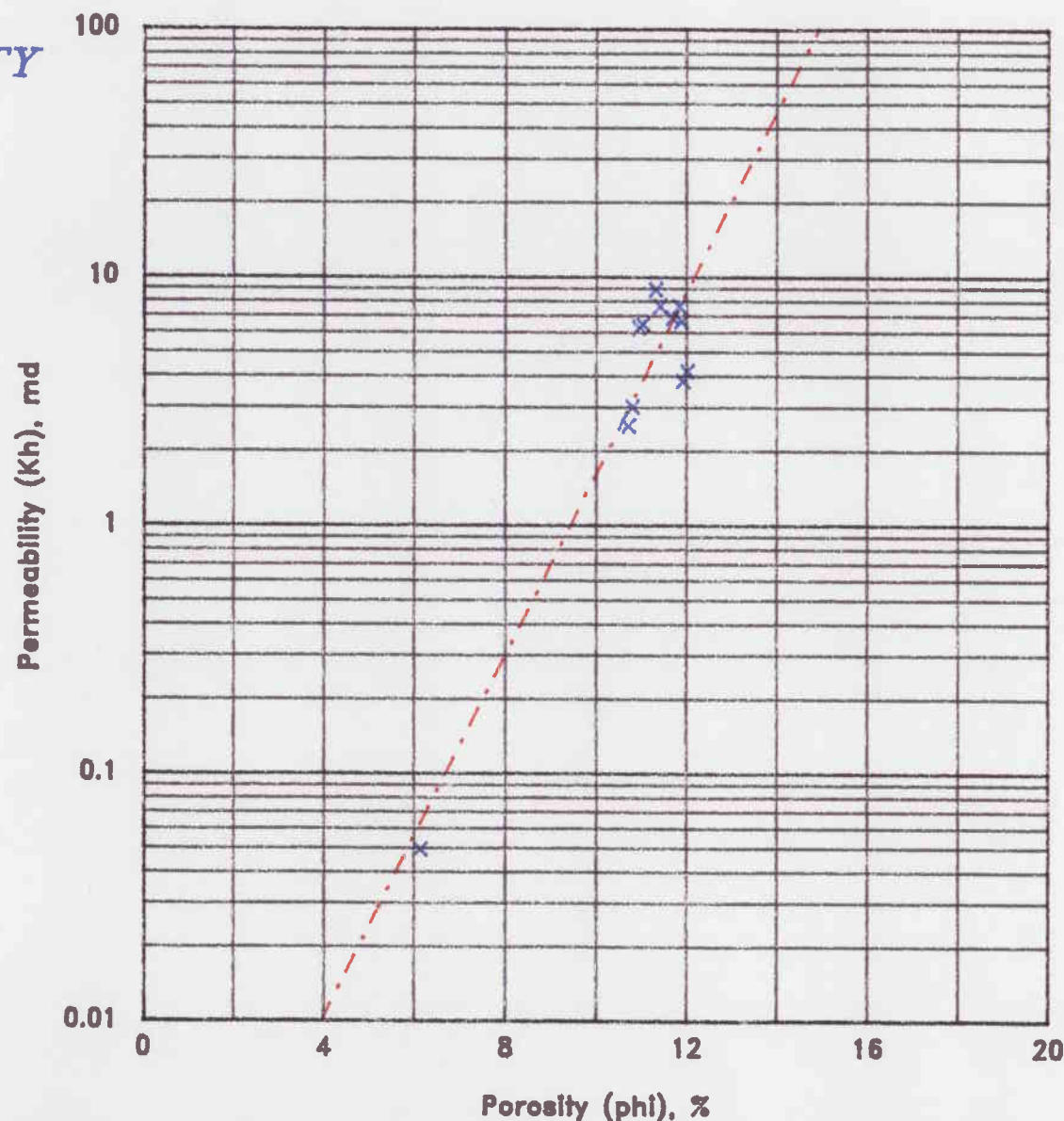
Equation of the Line

$\log Kh = \alpha \phi + \beta$

$\log Kh = 0.3647 \phi - 3.4402$

Correlation Coefficient : 0.945

Weber Sandstone



**BEARD OIL COMPANY**

ENTERPRISE PLAZA, SUITE 200  
5600 NORTH MAY AVENUE  
OKLAHOMA CITY, OKLAHOMA 73112  
TELECOPIER NO. 405/842-9901  
405/842-2333

November 13, 1992

**RECEIVED**

NOV 16 1992

DIVISION OF  
OIL GAS & MINING

State of Utah  
Department of Mineral Resources  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Attention: Vicky Carney,  
Production Group Supervisor

Re: Ashley Valley #1 43 22E 34  
API No. 43-047-31880  
Uintah County, Utah  
Submittal of Additional Well Data

Dear Ms. Carney:

In response to your request of November 4, 1992, we submit the following well records for the captioned well:

- 1) SHDT-Dipmeter Monitor Log;
- 2) MSD-Dipmeter Computed Result;
- 3) Sample Mud Log;
- 4) DST #1 Report;
- 5) TerraTek Core Analysis Report.

This should complete the file for this dry hole. There was no CBL log run because production casing was not set in this well. Please let us know if this is not satisfactory or if you need additional information.

Sincerely,

BEARD OIL COMPANY



Ivan D. Allred, Jr.,  
Vice President

IDAJ:tlg

Encl.'s



REPORT NO.  
109539

PAGE NO. 1

TEST DATE:  
13-JAN-1990

# STAR<sup>TM</sup>

## A Schlumberger Transient Analysis Report Based On Model Verified<sup>TM</sup> Interpretation Of A Schlumberger Drillstem Test

Schlumberger

Company: BEARD OIL CO.

Well: ASHLEY VALLEY #1

### TEST IDENTIFICATION

Test Type ..... MFE OH DST  
Test No. .... 1  
Formation ..... WEBER  
Test Interval (ft) ... 4804 - 4839  
Reference Depth ..... KELLY BUSHING

### WELL LOCATION

Field ..... WILD CAT  
County ..... UTAH  
State ..... UTAH  
Sec/Twn/Rng ..... S34T49R22E  
Elevation (ft) ..... 5085  
NOV 16 1992  
DIVISION OF  
OIL GAS & MINING

### HOLE CONDITIONS

Total Depth (MD/TUD)(ft) . 4839  
Hole Size (in) ..... 7 7/8  
Casing/Liner I.D. (in) ...  
Perf'd Interv./Nt Pay(ft). -- / 35  
Shot Density/Diameter(in).

### MUD PROPERTIES

Mud Type ..... POLY + 6  
Mud Weight (lb/gal) ..... 9.5  
Mud Resistivity (ohm.m) .. 0.70 @ 60 DEG. F.  
Filtrate Resistiv.(ohm.m). 0.75 @ 60 DEG. F.  
Filtrate Chlorides (ppm) . 9000

### INITIAL TEST CONDITIONS

Initial Hydrostatic (psi). 2353  
Gas Cushion Type ..... NONE  
Surface Pressure (psi) ... --  
Liquid Cushion Type ..... NONE  
Cushion Length (ft) ..... --

### TEST STRING CONFIGURATION

Pipe Length (ft)/I.D.(in). 4225 / 3.34  
Collar Length ft/I.D.(in). 540 / 2.25  
Packer Depths (ft) ..... 4804  
Bottomhole Choke Size(in). 1/2  
Gauge Depth (ft)/Type .... 4853 / MECHANICAL

### NET PIPE RECOVERY

Volume	Fluid Type	Properties
153 FT.	MC WATER W/	SPECKS OF OIL
		RW=0.70@60D/9000 PPM
2495 FT.	FORM. WATER	(BRACKISH)
		700 TO 2200 PPM CL.
		2.6 - 4.1 RW @ 60 D

### NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
0.26 SCF	GAS	CORRECTED TO PWF
2420 CC	WATER	RW = 4.1 @ 60 DEG.
		700 PPM CL.
Press. 35		GOR: GLR: 17

### VALIDATION RESULTS

Model of Behavior ..... HOMOGENEOUS  
Fluid Type Used ..... WATER  
Reservoir Pressure (psi) . 2114  
Transmissivity (md.ft/cp) 1014  
Permeability (md) ..... 17.3  
Skin Factor/Damage Ratio . 3.3  
Storativity Ratio .....  
Interporosity Flow Coeff..  
Distance to Anomaly (ft).  
Investigation Radius (ft). 141  
Potentiometric Surf. (ft).

### ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API) ...  
Basic Solids (%) ..... 0  
Gas Gravity ..... 0.650  
Water Cut (%) ..... 100  
Viscosity (cp) ..... 0.598  
Tot. Compress. (1/psi) ... 1.099E-5  
Porosity (%) ..... 12  
Reservoir Temperature (F). 110  
Form.Vol.Factor (bbl/STB). 1.006

PRODUCTION RATE DURING TEST: 710 BHPD Q-Last

### COMMENTS:

THE FINAL SHUT-IN PRESSURE BUILD-UP DATA WAS ANALYZED USING LOG-LOG AND SEMI-LOG ANALYSIS TECHNIQUES TO DETERMINE THE RESERVOIR BEHAVIOR MODEL AND RESERVOIR PARAMETERS OF P\*, Kh/u, AND SKIN. ANALYSIS OF THE SHUT-IN DATA INDICATES THE PRESENCE OF A HOMOGENEOUS SYSTEM WITH WELLBORE STORAGE AND SKIN IN EARLY TIME, TRANSITIONAL FLOW REGIME IN MID-TIME, AND INFINITE-ACTING RADIAL FLOW REGIME PRESENT IN LATE TIME. THE DATA WAS MODEL-VERIFIED(tm) TO CONFIRM THE ACCURACY OF THE RESERVOIR MODEL CHOSEN AND THE ANALYSIS RESULTS, WITH GOOD AGREEMENT BETWEEN THE THEORETICAL MODEL RESPONSE AND THE ACTUAL DATA. SEE THE ANALYSIS PLOTS BEGINNING ON PAGE 2 OF THIS REPORT.

REPORT NO.  
109539

PAGE NO. 2

OIL WELL  
LOG-LOG ANALYSIS

Schlumberger

'log([p-p(Dt=0)]) versus log(Dt)' PLOT

WELLBORE STORAGE AND SKIN  
after: Gringarten A.C. et al. SPE 8205  
Las Vegas, Nev., Sept 23-26, 1979

DATA IDENTIFICATION

Flow period# 2

☐ Drawdown ☒ Build-up

☒ p(Dt=0) = 1212.8 psi

☒ Duration of previous flow period: tp = 0.86000 hr

FLOW REGIME IDENTIFICATION

☒ WELLBORE STORAGE:  
Unit-slope straight line

ENDS at Dt = 0.015000 hr

☒ INFINITE ACTING RADIAL FLOW:  
Semi-log straight line

STARTS at Dt = 0.25000 hr

ENDS at Dt = 1.1000 hr

☐ BOUNDARY EFFECTS:  
No-flow: pseudo steady-state  
Constant pressure

STARTS at Dt =

STARTS at Dt =

TYPE-CURVE MATCH

☒ Match-point: pD = 0.010050 | Dp = 1

tD/CD = 1025.4 | Dt = 1

☒ Match curve: CDe(2S) = 3.8407E4

CALCULATIONS

☒ kh(from pressure match)

= 606.14 md.ft

☐ C(from unit slope straight line)

=

☐ kh(from time match)

=

☒ C(from time match)

= 2.9168E-04 Bbl/psi

☒ CD

= 52.477

☒ S(from curve match)

= 3.2978

☒ xf(equivalent fracture half-length)

= 0.024249 ft

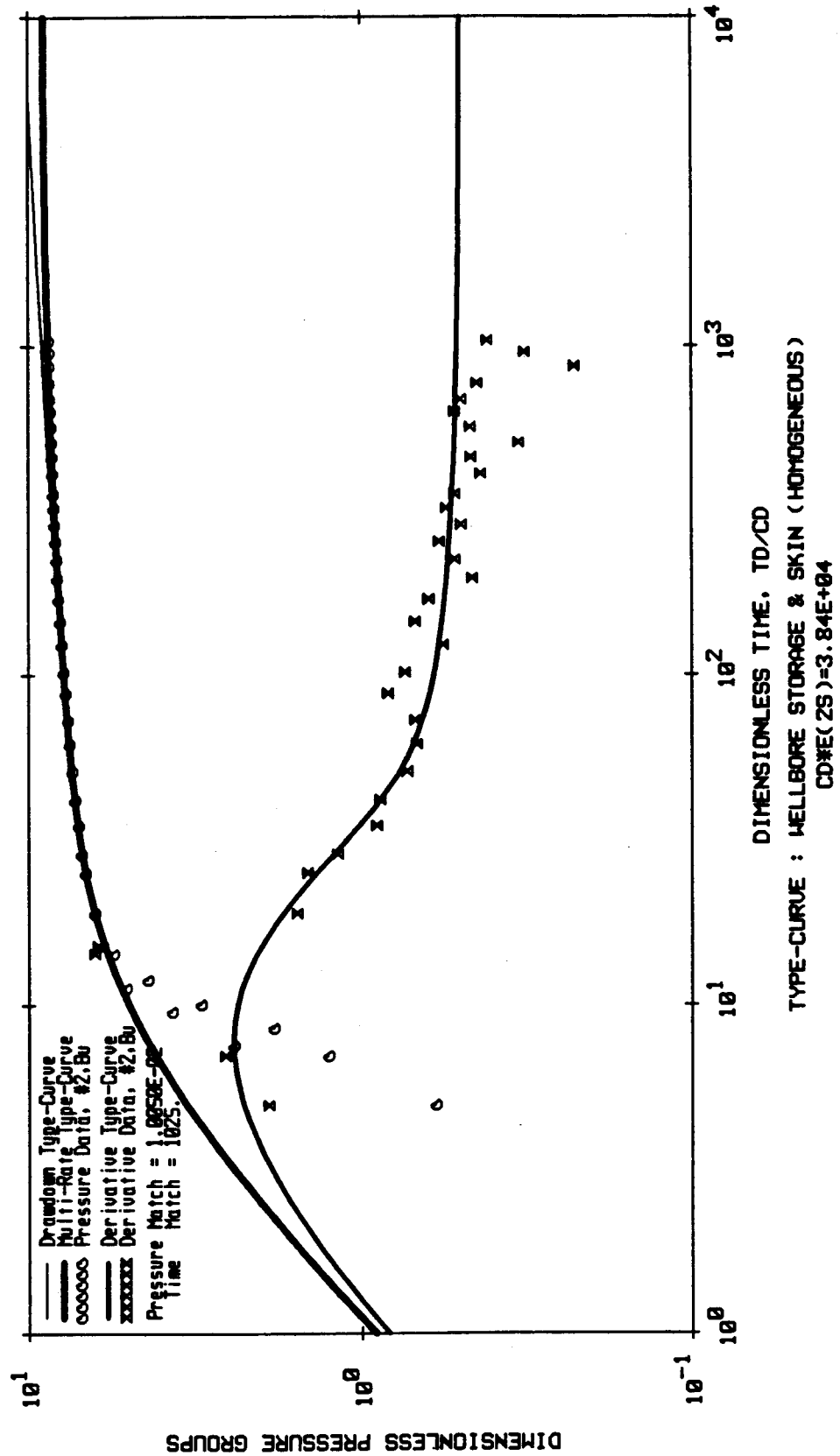
☒ k

= 17.318 md

COMMENTS

**DIMENSIONLESS MULTI-RATE  
PLOT : LOG-LOG MATCH FOR  
#2, Bu**

Schlumberger

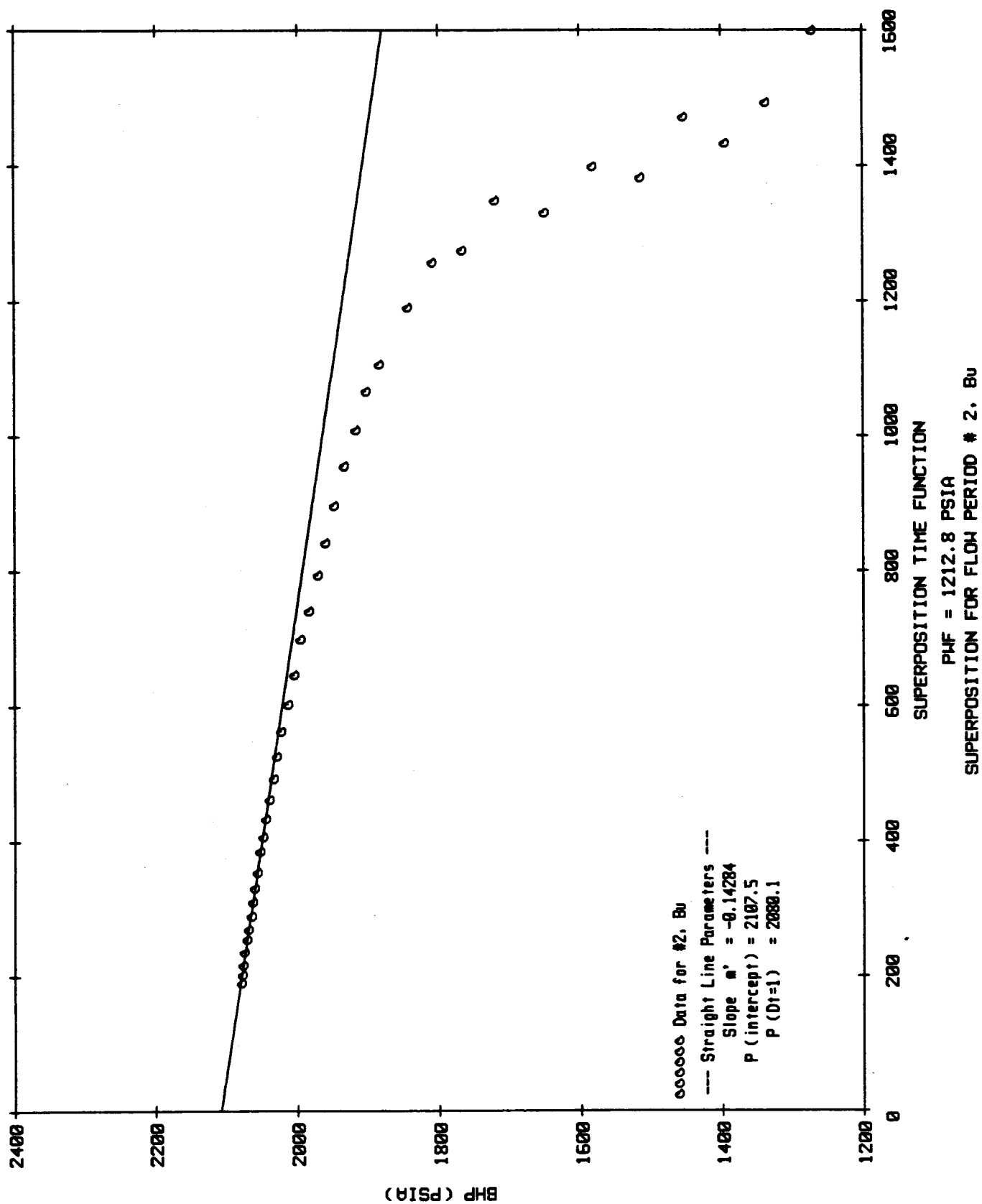


REPORT NO.  
109539

PAGE NO. 4

INFINITE-ACTING RADIAL FLOW  
ANALYSIS: SUPERPOSITION PLOT  
FOR #2, Bu

Schlumberger

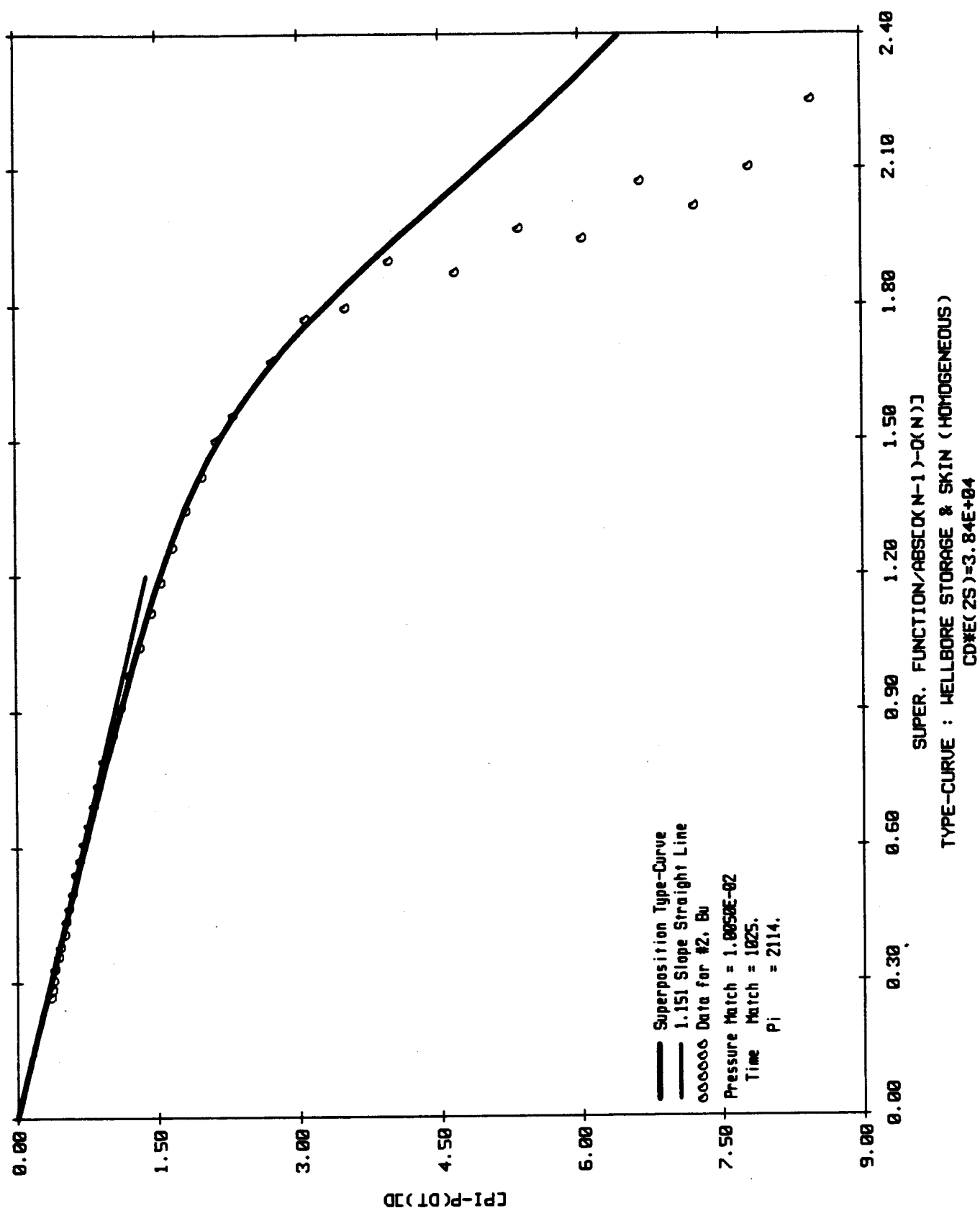


REPORT NO.  
109539

PAGE NO. 5

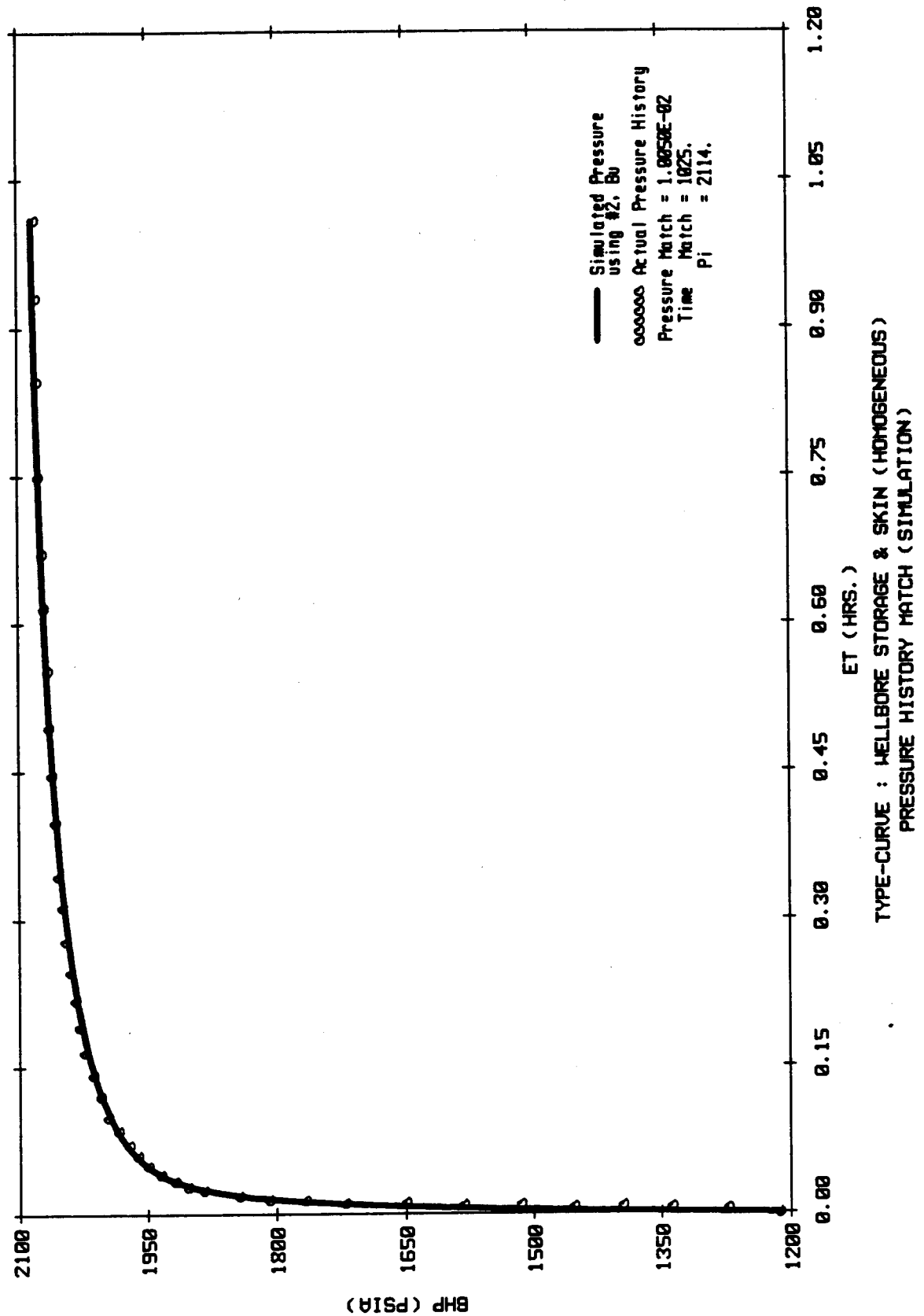
DIMENSIONLESS SUPERPOSITION  
PLOT FOR  
#2, Bu

Schlumberger



# PRESSURE HISTORY MATCH SIMULATION

Schlumberger



## SEQUENCE OF EVENTS

Schlumberger

EVENT NO.	DATE	TIME (HR:MIN)	DESCRIPTION	ELAPSED TIME (MIN)	BHP (PSIA)	WHP (PSIG)
1	13-JAN	1730	SET PACKERS	-9.89	2353	
2		1732	OPENED TOOL-CLOSED CHAMBR	0.00	119	8" BLOW
3		1737	CLOSED FOR INITIAL SHUTIN	4.30	442	1.5 PSIG
4		1807	FINISHED SHUT-IN	33.35	2077	1.5 PSIG
5		1807	RE-OPENED TOOL	34.50	481	1.5 PSIG
		1812				3 PSIG
		1817				4.5 PSIG
		1827				8 PSIG
6		1837	CLOSED FOR FINAL SHUT-IN	64.42	1213	12.75 PSI
7		1937	FINISHED SHUT-IN	125.00	2079	0
8		1940	PULLED PACKERS LOOSE	127.41	2335	
			NOTE: NO FILL ON BOTTOM.			
			PULLED LOOSE EASILY.			
			DID NOT REVERSE OUT.			

# BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 109539

COMPANY : BEARD OIL CO.

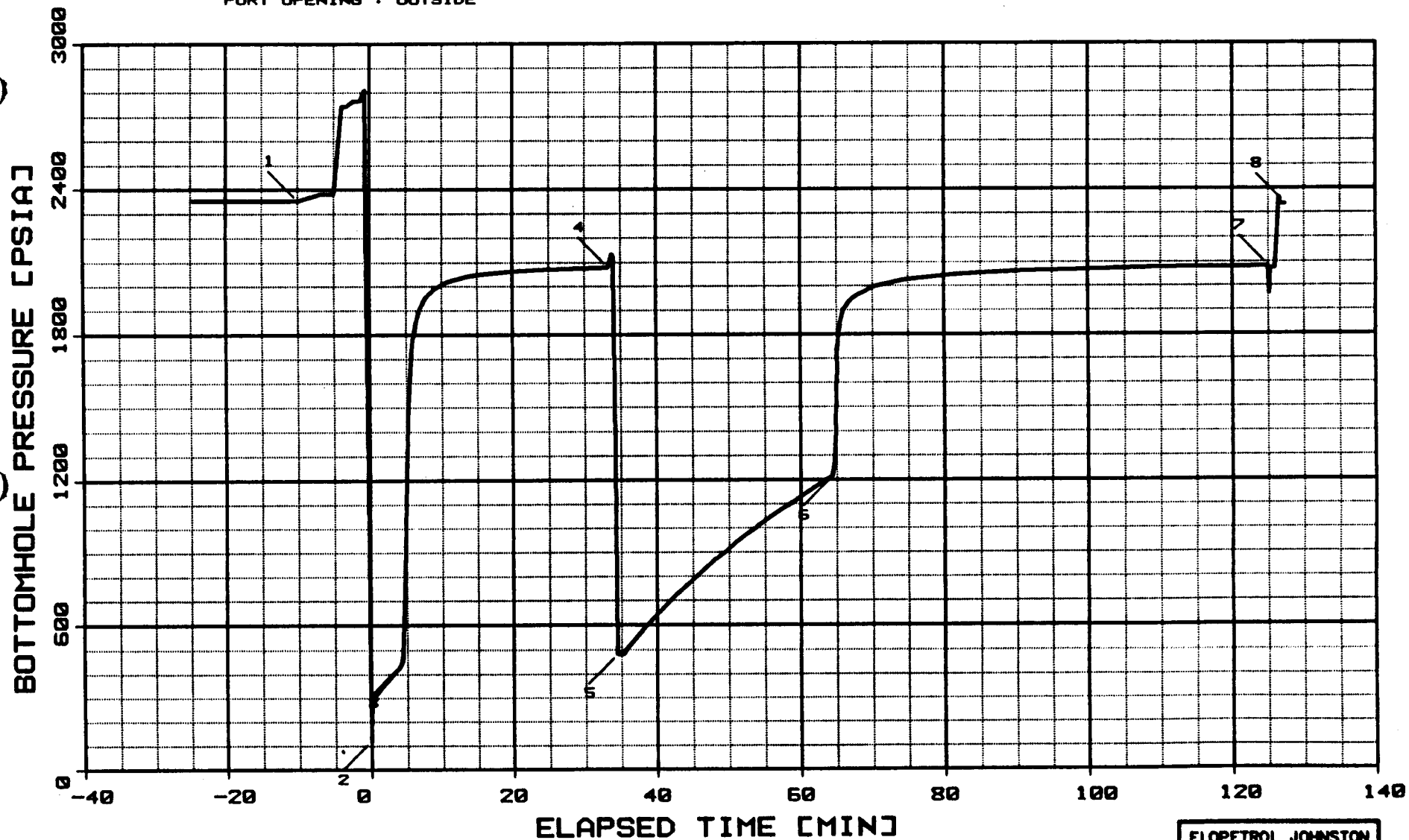
INSTRUMENT NO. 1929

WELL : ASHLEY VALLEY #1

DEPTH : 4853 FT

CAPACITY : 6400 PSI

PORT OPENING : OUTSIDE



FLOPETROL JOHNSTON

Schlumberger



\*\*\*\*\*  
 \* WELL TEST DATA PRINTOUT \*  
 \*\*\*\*\*

FIELD REPORT # : 109539

COMPANY : BEARD OIL CO.  
 WELL : ASHLEY VALLEY #1

INSTRUMENT # : 1929  
 CAPACITY [PSI] : 6400.  
 DEPTH [FT] : 4853.0  
 PORT OPENING : OUTSIDE  
 TEMPERATURE [DEG F] : 110.0

LABEL POINT INFORMATION  
 \*\*\*\*\*

#	TIME OF DAY HH:MM:SS	DATE DD-MM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA
***	*****	*****	*****	*****	*****
1	17:22: 7	13-JA	HYDROSTATIC MUD	-9.89	2353
2	17:32: 0	13-JA	START FLOW	0.00	119
3	17:36:18	13-JA	END FLOW & START SHUT-IN	4.30	442
4	18: 5:21	13-JA	END SHUT-IN	33.35	2077
5	18: 6:30	13-JA	START FLOW	34.50	481
6	18:36:25	13-JA	END FLOW & START SHUT-IN	64.42	1213
7	19:37: 0	13-JA	END SHUT-IN	125.00	2079
8	19:39:25	13-JA	HYDROSTATIC MUD	127.41	2335

SUMMARY OF FLOW PERIODS  
 \*\*\*\*\*

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA
*****	*****	*****	*****	*****	*****
1	0.00	4.30	4.30	119	442
2	34.50	64.42	29.92	481	1213

SUMMARY OF SHUTIN PERIODS  
 \*\*\*\*\*

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
*****	*****	*****	*****	*****	*****	*****	*****
1	4.30	33.35	29.05	442	2077	442	4.30
2	64.42	125.00	60.58	1213	2079	1213	34.22

## TEST PHASE : FLOW PERIOD # 1

TIME OF DAY	DATE	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MM			
*****	*****	*****	*****	*****

17:32:0	13-JA	0.00	0.00	119
17:36:18	13-JA	4.30	4.30	442

## TEST PHASE : SHUTIN PERIOD # 1

FINAL FLOW PRESSURE [PSIA] = 442  
PRODUCING TIME [MIN] = 4.30

TIME OF DAY	DATE	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM					
*****	*****	*****	*****	*****	*****	*****

17:36:18	13-JA	4.30	0.00	442	0	
17:37:18	13-JA	5.30	1.00	1465	1022	0.724
17:38:18	13-JA	6.30	2.00	1835	1393	0.498
17:39:18	13-JA	7.30	3.00	1924	1482	0.386
17:40:18	13-JA	8.30	4.00	1968	1525	0.317
17:41:18	13-JA	9.30	5.00	1994	1551	0.270
17:42:18	13-JA	10.30	6.00	2009	1567	0.235
17:43:18	13-JA	11.30	7.00	2021	1579	0.208
17:44:18	13-JA	12.30	8.00	2029	1587	0.187
17:45:18	13-JA	13.30	9.00	2036	1594	0.170
17:46:18	13-JA	14.30	10.00	2041	1599	0.155
17:48:18	13-JA	16.30	12.00	2050	1608	0.133
17:50:18	13-JA	18.30	14.00	2056	1614	0.116
17:52:18	13-JA	20.30	16.00	2061	1619	0.103
17:54:18	13-JA	22.30	18.00	2064	1622	0.093
17:56:18	13-JA	24.30	20.00	2068	1625	0.085
17:58:18	13-JA	26.30	22.00	2070	1628	0.078
18:0:18	13-JA	28.30	24.00	2072	1630	0.072
18:2:18	13-JA	30.30	26.00	2074	1631	0.066
18:4:18	13-JA	32.30	28.00	2076	1633	0.062
18:5:21	13-JA	33.35	29.05	2077	1635	0.060

## TEST PHASE : FLOW PERIOD # 2

TIME OF DAY	DATE	ELAPSED TIME,MIN	DELTA TIME,MIN	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MM			
*****	*****	*****	*****	*****

18:6:30	13-JA	34.50	0.00	481
18:11:30	13-JA	39.50	5.00	626
18:16:30	13-JA	44.50	10.00	771
18:21:30	13-JA	49.50	15.00	899
18:26:30	13-JA	54.50	20.00	1017

## TEST PHASE : FLOW PERIOD # 2

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA
HH:MM:SS	DD-MM			

\*\*\*\*\*

18:31:30	13-JA	59.50	25.00	1119
18:36:25	13-JA	64.42	29.92	1213

## TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE [PSIA] = 1213

PRODUCING TIME [MIN] = 34.22

TIME OF DAY	DATE	ELAPSED TIME, MIN	DELTA TIME, MIN	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
HH:MM:SS	DD-MM					

\*\*\*\*\*

18:36:25	13-JA	64.42	0.00	1213	0	
18:37:25	13-JA	65.42	1.00	1826	613	1.547
18:38:25	13-JA	66.42	2.00	1916	703	1.258
18:39:25	13-JA	67.42	3.00	1949	736	1.094
18:40:25	13-JA	68.42	4.00	1967	755	0.980
18:41:25	13-JA	69.42	5.00	1982	769	0.895
18:42:25	13-JA	70.42	6.00	1996	784	0.826
18:43:25	13-JA	71.42	7.00	2003	790	0.770
18:44:25	13-JA	72.42	8.00	2010	797	0.722
18:45:25	13-JA	73.42	9.00	2017	804	0.681
18:46:25	13-JA	74.42	10.00	2024	811	0.646
18:48:25	13-JA	76.42	12.00	2031	818	0.586
18:50:25	13-JA	78.42	14.00	2037	824	0.537
18:52:25	13-JA	80.42	16.00	2043	830	0.497
18:54:25	13-JA	82.42	18.00	2047	834	0.463
18:56:25	13-JA	84.42	20.00	2052	839	0.433
18:58:25	13-JA	86.42	22.00	2055	842	0.407
19: 0:25	13-JA	88.42	24.00	2057	844	0.385
19: 2:25	13-JA	90.42	26.00	2059	847	0.365
19: 4:25	13-JA	92.42	28.00	2062	849	0.347
19: 6:25	13-JA	94.42	30.00	2064	851	0.331
19:11:25	13-JA	99.42	35.00	2067	854	0.296
19:16:25	13-JA	104.42	40.00	2071	858	0.268
19:21:25	13-JA	109.42	45.00	2075	862	0.246
19:26:25	13-JA	114.42	50.00	2077	864	0.226
19:31:25	13-JA	119.42	55.00	2078	865	0.210
19:36:25	13-JA	124.42	60.00	2079	866	0.196
19:37: 0	13-JA	125.00	60.58	2079	867	0.194

$\Delta T$  (MIN)

0.14 0.20 0.29 0.42 0.62 0.93 1.4 2.4 4.3 10 00

# HORNER PLOT

FIELD REPORT NO. 109539

INSTRUMENT NO. 1929

COMPANY : BEARD OIL CO.

WELL : ASHLEY VALLEY #1

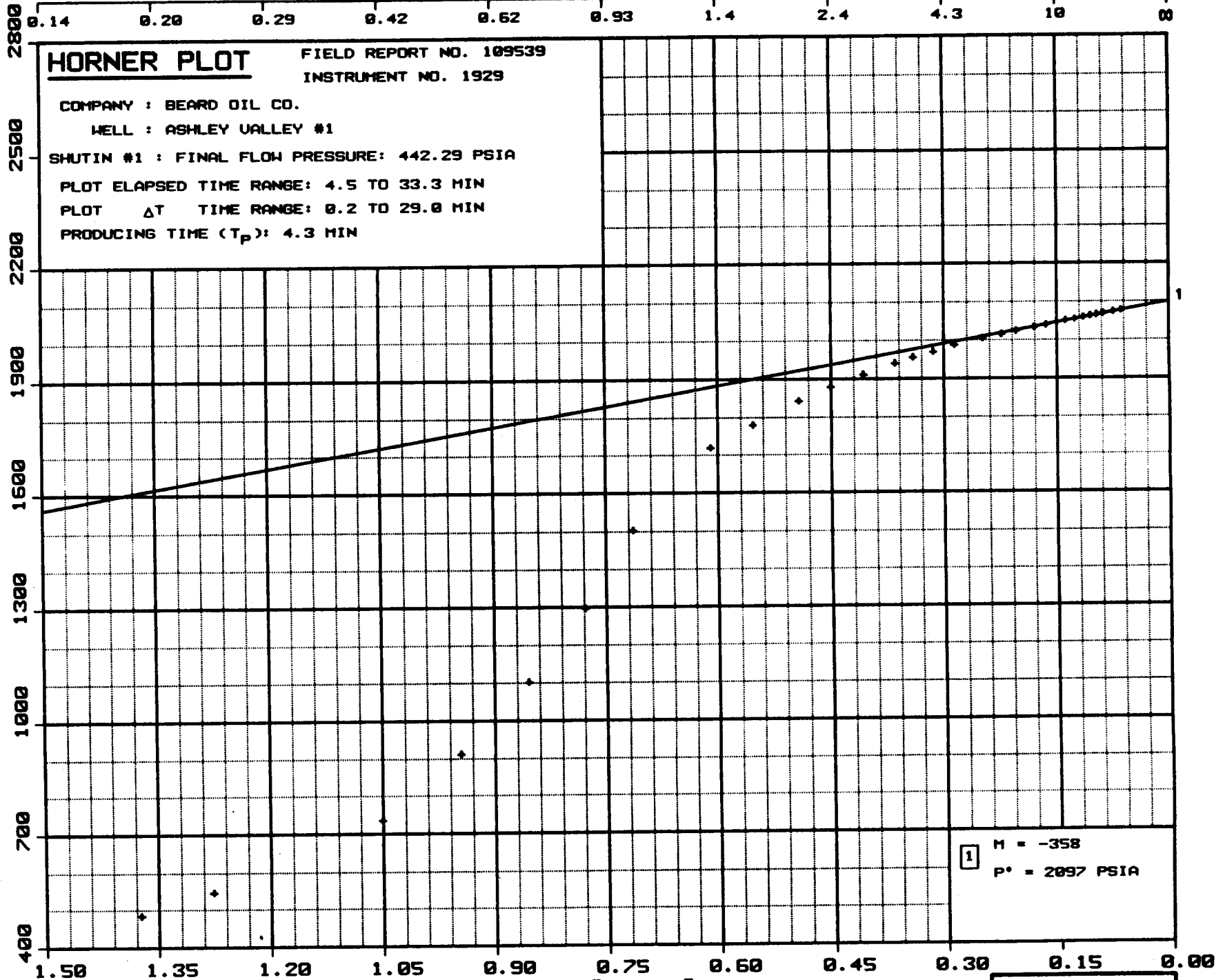
SHUTIN #1 : FINAL FLOW PRESSURE: 442.29 PSIA

PLOT ELAPSED TIME RANGE: 4.5 TO 33.3 MIN

PLOT  $\Delta T$  TIME RANGE: 0.2 TO 29.0 MIN

PRODUCING TIME ( $T_p$ ): 4.3 MIN

SHUTIN PRESSURE [PSIA]



1 M = -358  
P\* = 2097 PSIA

FLOPETROL JOHNSTON

Schlumberger

# LOG LOG PLOT

COMPANY : BEARD OIL CO.

WELL : ASHLEY VALLEY #1

FIELD REPORT NO. 109539

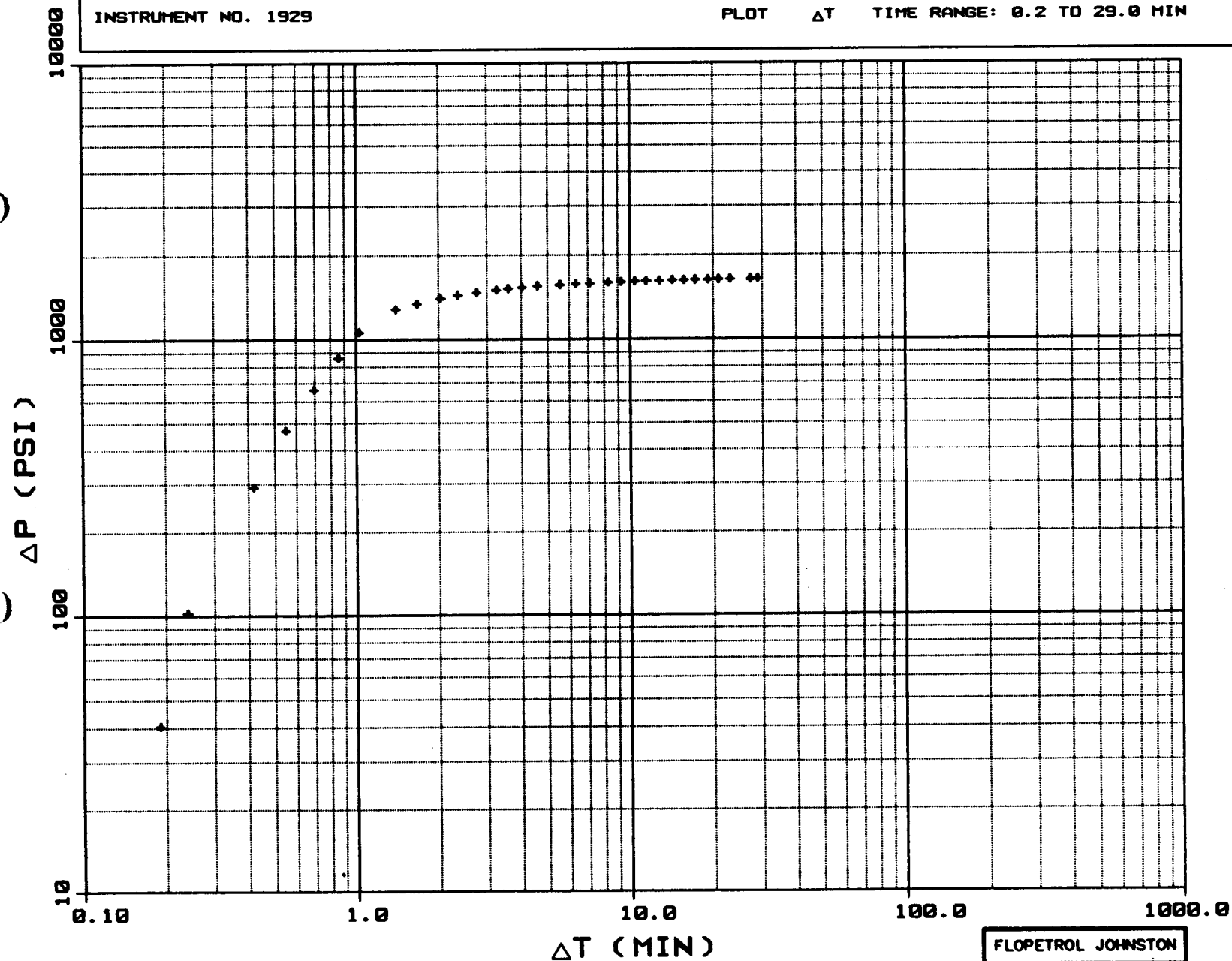
INSTRUMENT NO. 1929

SHUTIN #1 :

FINAL FLOW PRESSURE (PWF): 442.29 PSIA

PLOT ELAPSED TIME RANGE: 4.5 TO 33.3 MIN

PLOT  $\Delta T$  TIME RANGE: 0.2 TO 29.0 MIN



FLOPETROL JOHNSTON

Schlumberger

$\Delta T$  (MIN)

0.11 0.19 0.35 0.62 1.1 2.0 3.8 7.4 15 43 80

# HORNER PLOT

FIELD REPORT NO. 109539

INSTRUMENT NO. 1929

COMPANY : BEARD OIL CO.

WELL : ASHLEY VALLEY #1

SHUTIN #2 : FINAL FLOW PRESSURE: 1212.84 PSIA

PLOT ELAPSED TIME RANGE: 64.7 TO 125.0 MIN

PLOT  $\Delta T$  TIME RANGE: 0.3 TO 60.6 MIN

PRODUCING TIME ( $T_p$ ): 34.2 MIN

SHUTIN PRESSURE [PSIA]

2800  
2600  
2400  
2200  
2000  
1800  
1600  
1400  
1200

2.50 2.25 2.00 1.75 1.50 1.25 1.00 0.75 0.50 0.25 0.00

$\text{LOG} \left[ \frac{T_p + \Delta T}{\Delta T} \right]$

1

M = -118

P\* = 2102 PSIA

FLOPETROL JOHNSTON

Schlumberger

# LOG LOG PLOT

COMPANY : BEARD OIL CO.

WELL : ASHLEY VALLEY #1

FIELD REPORT NO. 109539

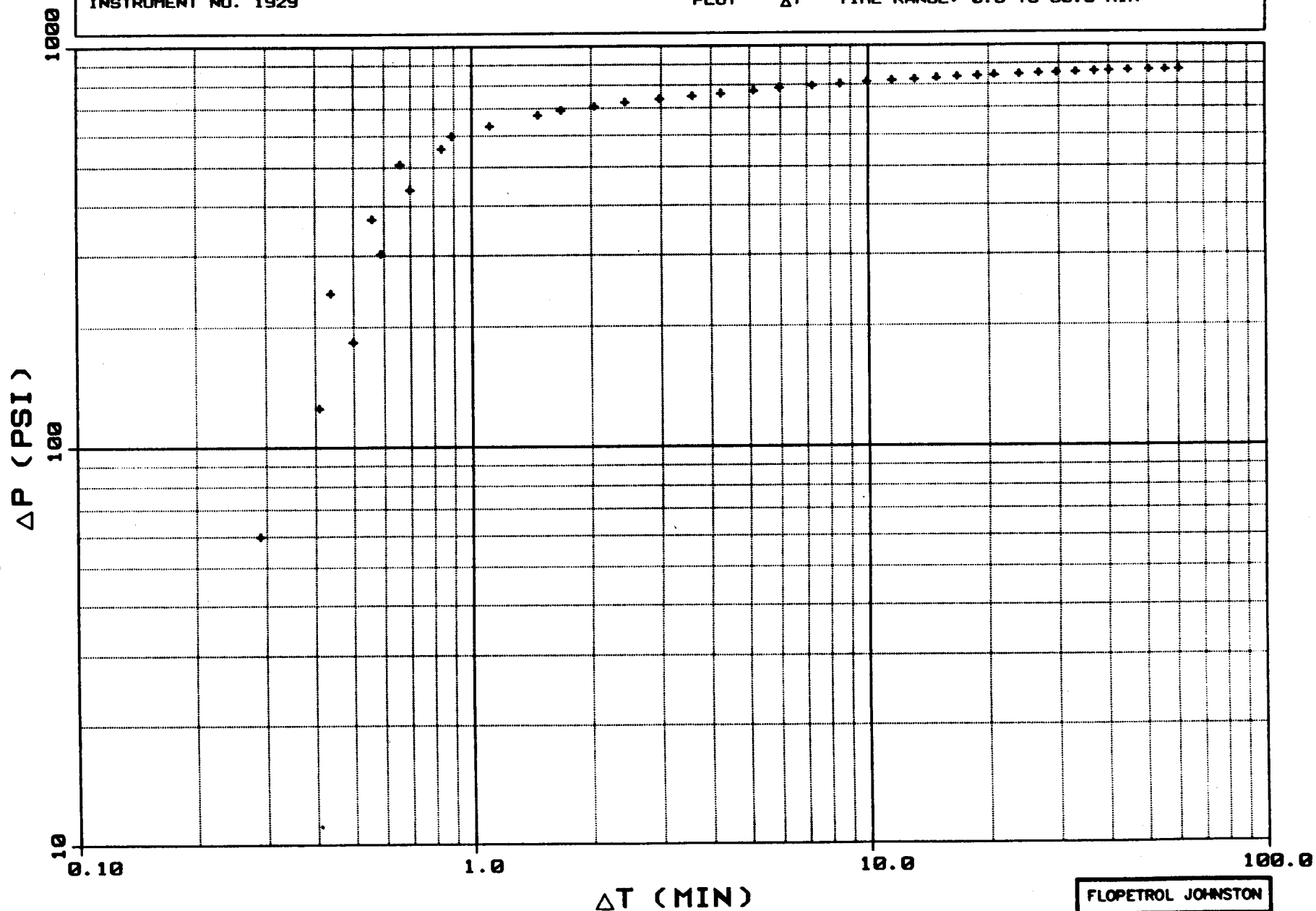
INSTRUMENT NO. 1929

SHUTIN #2 :

FINAL FLOW PRESSURE (PWF): 1212.84 PSIA

PLOT ELAPSED TIME RANGE: 64.7 TO 125.0 MIN

PLOT  $\Delta T$  TIME RANGE: 0.3 TO 60.6 MIN



FLOPETROL JOHNSTON

Schlumberger

INSPECTION FORM 4      STATE OF UTAH  
DIVISION OF OIL GAS AND MINING

## OIL AND GAS PRODUCTION FACILITIES

Well Name: <u>ASHLEY VALLEY #1</u>	API Number: <u>43-047-31880</u>		
Qtr/Qtr: <u>NW/SW</u>	Section: <u>34</u>	Township: <u>4S</u>	Range: <u>22E</u>
Company Name: <u>BEARD OIL COMPANY</u>			
Lease: State <u>          </u>	Fee <u>X</u>	Federal <u>          </u>	Indian <u>          </u>
Inspector: <u>DAVID W. HACKFORD</u>		Date: <u>1/20/2000</u>	

Type of Inspection:    Routine X                      Complaint                      OtherWell status at time of visit:    Producing                                 Shut-in                                 Other XCOMMENTS: Well has been PA'd. Monument in place with correct information. Location has been reclaimed. No leaks or spills or open pits. No equipment. Looks good.